Gender Resources for Urban Agriculture Research: Methodology, Directory & Annotated Bibliography

by
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Ce document est aussi disponible en français.

This document is available on www.idrc.ca/cfp/gender.html
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Glossary of Terms

gender
the socio-cultural construction of roles and relationships between men and women that change over time and are context-specific

gender roles
the assigned activities and relative position in society of men and women that delineate access to opportunities and resources as based on local cultural perceptions of masculinity and femininity

gender relations
the continual (daily) interaction and (re)negotiation between men and women regarding their respective roles, responsibilities and obligations

gender dynamics
the interaction between social, economic and political processes and the relationships between men and women in a particular context

gender-disaggregated data
the collection of information, from a sample group that includes both male and female participants, on the different experiences, needs, interests, and access to opportunities and resources of men and women so as to establish an accurate picture of the local context

gender analysis
the examination of relationships between men and women and the factors that create and influence differential opportunities and constraints for men and women at the local, regional and global level
Introduction

This work reflects the commitment and understanding of the Cities Feeding People (CFP) Program Initiative, at the International Development Research Centre (IDRC), Ottawa Canada, to the relevance and significance of gender issues in urban agriculture (UA) research. The formalization of a gender framework into CFP projects and programming will encourage and support more accurate research results that address the needs and interests of both men and women in UA systems, particularly in developing countries. It will enhance the efficiency and sustainability of the research process to help ensure more appropriate technology and policy interventions with a more equitable distribution of benefits.

The publication of this three-part document represents a significant step towards encouraging and building gender capacity in development research on UA. It focuses on the practical application of gender tools and resources. The strength of the document is that it explains and illustrates how gender can be incorporated into research, and how gender dynamics may unfold in a particular context. As a teaching tool, the document presents researchers with various resources that can be used as building blocks in enhancing and strengthening research endeavours. In addition to capacity building, it seeks to address the issues of affordability and time constraints for research teams by providing a straightforward and comprehensive approach. The document is organized along three sections, as are described below.

Structure
First, the gender methodology presents a simple and systematic approach on how to incorporate gender issues in UA research. It is an inexpensive teaching tool that can be used by individuals, non-governmental organizations, and development organizations without external training or consultation. The methodology is designed to be used as it appears, or it can be adapted by research teams to suit their particular research context. This section provides numerous tools and illustrations to explore potential gender dynamics in UA systems. It is divided into three main sections, based on three stages in the research project cycle, namely proposal, data collection, interpretation and analysis, and monitoring and evaluation. The methodology is a comprehensive base from which to begin to understand gender roles and relations. It may be used in combination with additional methodological frameworks, training workshops and seminars, or external gender consultations to enhance the scope and depth of gender analysis in UA research.

Second, the directory provides a listing of gender resource persons. Contact information has been included, with permission from the individuals and groups. Researchers are encouraged to seek the advice and expertise of those familiar with gender and related methodological issues to further strengthen research projects. General areas of interest and expertise appear in the directory to help guide researchers to relevant resource persons. These individuals can be consulted during proposal development, project implementation, and/or monitoring and evaluation stages.
Third, the annotated bibliography provides a quick reference guide to the literature on gender and UA. It allows researchers to understand the aspects of gender dynamics in UA systems that have been documented. The abstracts highlight the main gender findings in each reference. This bibliography gives researchers a snapshot of relevant materials which may be difficult for researchers to access.

**Review process**

The entire document, in particular the gender methodology, has gone through an extensive review process. It has benefitted from insights gained at the CFP PI Prospectus Consultation Meeting in Nairobi, Kenya, in October 1997. During this meeting, CFP team members voiced their opinions, queries, concerns and support regarding the incorporation of gender into the program initiative. The candidness with which gender issues were discussed provided invaluable insights on individual perceptions and understandings of gender and related concepts. The document very much reflects an effort to design a gender framework that is accessible and useful to both CFP team members and research partners. The document has seen many versions and has been distributed to CFP team members and resource persons, as well as to other persons within IDRC. Two seminar presentations of the methodology generated comments and general debate on gender tools, concepts and mainstreaming. Many suggestions have been incorporated into this final version of the document.

The design, production and distribution of this document is the first step in a long process towards the operationalization of gender into UA research. The CFP team members will encourage the use of the document by all research partners. A review of CFP research projects in 2001 will assess the usefulness and effectiveness of this document in enhancing and strengthening gender issues in development research on UA. It is hoped that a greater interest in and understanding of gender dynamics in UA systems will gain momentum and set the stage for more appropriate interventions stemming from development research. It is only through the commitment of all stakeholders that gender awareness, sensitivity, and capacity will become a legitimate and natural part the research process.

All questions and comments are welcome.

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Section 1:

Methodology for Gender Analysis in Urban Agriculture Research
Methodology for Gender Analysis in Urban Agriculture Research

Introduction
This methodology has been developed to assist Cities Feeding People (CFP) team members, at the International Development Research Centre (IDRC), Canada, and research partners in undertaking gender analysis so that research on urban agriculture (UA) may be strengthened and enhanced. By considering, understanding and documenting gender dynamics within UA systems, more appropriate and equitable technology and policy interventions can be applied in local contexts.

While there may exist a growing consciousness of the relevance of gender in development research, there is a general lack of understanding of how exactly this type of analysis can be applied. This methodology provides researchers with simple and systematic tools that can be used for practical application of gender analysis within UA research. Gender analysis is most effective when considered an integral, natural part of a research project. Therefore, the methodology carries CFP team members and researchers through the entire project cycle, from the proposal stage through to evaluation. The point here is to move away from the compartmentalization of gender towards the full integration of gender as a key analytical tool in development research.

This methodology is meant to be a working document. It does not provide a set recipe -- not all tools, questions, or issues are relevant at all times, in all contexts. Similarly, the examples provided are meant to be illustrative rather than exhaustive. The methodology is designed to raise issues and promote active learning and thinking on the relevance and importance of gender analysis in UA research.

Research projects that aim to influence development interventions require accurate information about the circumstances of local persons and about who exactly “the people” are. “Visibility” is the starting point for the integration of both men and women of all socio-economic groups into development research on UA. Visibility comes through the collection of data on what men and women do, and how they do it. Here it is important to remember that gender cuts across all other socio-economic characteristics, including class, race, ethnicity, head-of-household, age, religion, and so on (FAO, 1995:4).

Beyond data collection, gender analysis requires that researchers consider why men and women are assigned certain roles, responsibilities and obligations, and why (as a result) the UA system functions as it does. Gender analysis inevitably leads to a fundamental examination of social structures and institutions (Rathgeber, 1990:494). Not only is it important to explore gender in relation to intra-household relations between men and women, it is also important to explore organizational, legal and political structures and ideas that reinforce gender differences, imbalances, and inequalities (SIDA, 1997:1-1).

Objective of the methodology
To provide CFP team members and research partners with simple and systematic guidelines and tools for incorporating gender analysis into all stages of the project cycle, in order to:

- better understand and document the form, significance and impact of gender dynamics at the household, local and regional level;
- encourage and support more accurate research results on UA systems; and
- enhance the efficiency and sustainability of the research process to help ensure more appropriate technology and policy interventions with a more equitable distribution of benefits.
How to use the methodology

The gender methodology is divided into three main sections, based on three stages of a research project: (i) proposal (ii) data collection, interpretation & analysis (iii) monitoring & evaluation. This format is intended to guide and assist CFP team members and research partners in incorporating gender analysis in the initial design and formulation of a project, throughout project implementation, and at various assessment stages. Gender analysis is generally much more effective when it is viewed as an integral and natural part of the research agenda, rather than as a separate component. Organization of the methodology is along the following three stages:

### 1. Proposal

This section provides researchers with a list of relevant gender issues to be considered in the initial design and formulation of a research project. CFP team members will refer to the list in advising on possible avenues for gender analysis, and in assessing the overall quality of a project proposal as relating to socio-economic and gender analysis.

### 2. Data Collection, Interpretation & Analysis

This section provides researchers with eight (8) tools for the practical application of gender analysis in UA research. The tools focus on collecting, interpreting and analyzing different types of information required to adequately understand and document gender-differentiated roles, responsibilities and obligations of men and women in UA systems. Tools included in this section are as follows:

- Tool #1 Gender & Urban Agriculture Issues List
- Tool #2 Gender Activity Analysis
- Tool #3 Gender Resource Analysis
- Tool #4 Gender Resource Mapping
- Tool #5 Perceptions of Organizations by Gender
- Tool #6 Gender Analysis Matrix
- Tool #7 Gender Benefits Analysis
- Tool #8 Problem Analysis

Tool #1 can be used as a main reference point for researchers incorporating gender analysis in UA research. Researchers are encouraged to use Tools #2 through #8, either individually or in combination, to enhance the scope and accuracy of gender analysis in a research project.

### 3. Monitoring & Evaluation

Gender guidelines for monitoring and evaluation provide CFP team members with an overview of issues to be considered at intermittent times during or at the end of the project cycle. This section is organized according to eight evaluation indicators as identified in the Evaluation Framework of the CFP Prospectus 1997-2000. These indicators include: human resource development, institutional capacity building, effective local partnerships, gender analysis, added value of multi-disciplinarity, scientific and methodological advances, research utilization, and fund leverage.
Gender Analysis in Urban Agriculture Research
Stage 1: Proposal

Objective
To provide CFP team members and research partners with an overview of gender issues related to UA to be considered in the design and formulation of a research project proposal.

Format
Gender issues are presented as questions and are organized by various components of a project proposal. Researchers will be provided with a copy of the gender issues list prior to or during the initial project design and formulation so that gender analysis can be integrated from the beginning of the project cycle. CFP team members will refer to the below list of gender issues in advising on possible avenues for gender analysis, and in assessing the overall quality of the project proposal as relating to socio-economic and gender analysis.

The list below is not inclusive and should not be used as a rigid tool. Not all issues are necessarily relevant to all UA research projects. CFP team members and research partners are encouraged to draw on those issues from the list that are relevant to and appropriate within a particular context. Similarly, CFP team members and research partners are encouraged to explore gender and UA issues that are not found on the list.
# Gender Issues List for Urban Agriculture Research Project Proposals

## Problem, Background & Rationale
- Does the proposal use broad references to “the poor” or “the community”?  
- Does the proposal differentiate within categories of “men” and “women” (e.g. by class, ethnicity, race, head-of-household, religion, age)?  
- How does this problem affect women and men differently?  
- Does this section detail the different constraints and needs of women and men?  
- Who was consulted and/or involved in identifying and describing this problem? Both men and women? What is their relationship to the said project (e.g. target group, local organization, project team member)?  
- Who is involved in the research design?

## Objectives
- Are gender dynamics included in the general or specific project objectives? Why or why not?  
- Is gender equity a specified objective? Why or why not?  
- Do the objectives specify between men and women? Other socio-economic groups (e.g. class, ethnicity, race, head-of-household, religion, age)?  
- Do the objectives make clear for whom the project benefits are intended? Why has this particular group been targeted?  
- Does the project contribute to men’s and women’s increased empowerment? How?  
- Do any of the objectives challenge the existing or traditional sexual division of labour, tasks, opportunities and responsibilities? How?

## Methodology
- Does the methodology include gender analysis?  
- How exactly will gender-disaggregated data be collected during the course of the project?  
- Will a variety of methods be used (e.g. quantitative and qualitative) in order to address gender differences?  
- Who will inform the data collection, interpretation and analysis (e.g. local men/women, researchers)?  
- Is the research team able to adequately address relevant gender issues?  
- Are there any women on the project team? What are their roles and responsibilities as compared to the male team members?  
- Will there be need for consultation or collaboration with a gender resource person?  
- At what stage of the research process will a gender resource person be required?  
- What form should this consultation or collaboration take?  
- What role (if any) will men's/women's organizations play in the research process?

## Institutional Linkages
- What linkages will be made with men’s/women’s organizations?  
- Will all stakeholders be involved in gender analysis? How exactly?

## Expected Outputs
- How will conclusions and recommendations impact or change existing gender dynamics? Are these impacts or changes expected to be largely positive or negative? For whom will they be positive or negative?  
- What are the (likely) short- and long-term affects of this research on the quality of life and general circumstances of men/women?  
- Will uptake of results include promotion of men's/women's interests? How?
Gender Analysis in Urban Agriculture Research
Section 2: Data Collection, Interpretation & Analysis

Objective
To provide researchers with simple and systematic tools for the practical application of gender analysis within UA research.

Format
This section includes eight tools for socio-economic and gender analysis. The tools focus on collecting, interpreting and analyzing different types of information required to adequately understand and document gender-differentiated roles, responsibilities and obligations of men and women in UA systems. Tools included in this section are as follows:

Tool #1 Gender & Urban Agriculture Issues List
Tool #2 Gender Activity Analysis
Tool #3 Gender Resource Analysis & Mapping
Tool #4 Perceptions of Organizations by Gender
Tool #5 Gender Analysis Matrix
Tool #6 Gender Benefits Analysis
Tool #7 Problem Analysis

Tool #1 can be used as a main reference point for researchers incorporating gender analysis in UA research. Researchers are encouraged to use Tools #2 through #8, either individually or in combination, to enhance the scope and accuracy of gender analysis in a research project. These tools are not exhaustive. They may be used to enrich the design and implementation of research by accessing relevant information within a local context.

This section of the methodology does not discuss the strengths and weaknesses of, nor the assumptions embedded in, standard research methods. Therefore, issues such as power relations between interviewers and interviewees, the scheduling of meetings during periods accessible to both men and women, different interpretations of circumstances and events by local persons and researchers, and recognition of contributions to and ownership of research results are not addressed. Critiques of standard research methods and methodological issues are examined in detail elsewhere.¹


Each tool is organized according to the following framework:

<table>
<thead>
<tr>
<th><strong>Objective</strong></th>
<th>identifies the purpose of the tool and the type of information for which it is best suited.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Collection</strong></td>
<td>offers suggestions on how the tool can be used in collecting gender-disaggregated data, through a variety of methods (e.g. questionnaires, participant observation, individual interviews, focus group discussions, and participatory exercises). Researchers should note that along with being disaggregated by sex, data should be further disaggregated by other variables, including class, race, ethnicity, head-of-household, age, religion, and so on, in order to accurately understand and document socio-economic and gender dynamics of a particular UA system.</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td>some tools include examples that researchers can use to collect gender-disaggregated data, including:</td>
</tr>
<tr>
<td></td>
<td>• gender activity analysis chart</td>
</tr>
<tr>
<td></td>
<td>• gender resource analysis chart</td>
</tr>
<tr>
<td></td>
<td>• list of UA-related organizations</td>
</tr>
<tr>
<td><strong>Key questions to consider</strong></td>
<td>tools include a list of questions and issues for researchers to consider when collecting gender-disaggregated data related to UA.</td>
</tr>
<tr>
<td><strong>Data Interpretation &amp; Analysis</strong></td>
<td>explores the significance of the tool in understanding and documenting exactly why a UA system functions as it does and what implications gender dynamics have on men’s and women’s roles, responsibilities and obligations in a particular context. Researchers are encouraged to move beyond gender-disaggregated data and question the form, significance and impact of gender dynamics in UA systems.</td>
</tr>
<tr>
<td><strong>UA Scenario</strong></td>
<td>each tool provides researchers with examples that point to the importance of gender interpretation and analysis of gender-disaggregated data. These examples are meant to be illustrative rather than exhaustive and highlight ways in which gender dynamics can shape and impact a UA system in a particular context. UA Scenarios are fictitious unless otherwise indicated.</td>
</tr>
</tbody>
</table>
TOOL #1 Gender & Urban Agriculture Issues List

Objective
To provide researchers with an overview of gender issues related to UA to be considered in the analysis of gender dynamics of an UA system.

Data Collection
The gender and UA issues listed below can be incorporated into a variety of quantitative or qualitative methods. The issues can inform the drafting of questionnaires, and interview questions for individuals or focus group discussions. Researchers can also review these issues prior to being participant observers in a local neighbourhood or community.

The first step in engaging in gender analysis in research is collecting gender-disaggregated data. The issues listed below are largely presented in the form of questions asking Who? What? Where? and How? By asking these questions, researchers can begin to explore gender issues relevant to UA systems. Along with being disaggregated by sex, data should be further disaggregated by other variables such as class, race, ethnicity, head-of-household, age, religion, and so on, in order to accurately understand and document the socio-economic and gender dynamics of a particular UA system.

The list below is not inclusive and should not be used as a rigid tool. Not all issues are necessarily relevant to all UA research projects. Researchers are encouraged to draw on those issues from the list that are relevant to and appropriate within a particular context. Similarly, researchers are encouraged to explore gender and UA issues that are not found on the list.

Data Interpretation & Analysis
Beyond the collection of gender-disaggregated data, researchers must ask the questions: Why exactly are local gender dynamics as they are? and What are the implications of the gender divisions of labour, resources and benefits of a particular UA system? The significance of in-depth data interpretation and analysis is best illustrated through the following UA Scenario:

UA Scenario #1: Income-generating potential of urban dairy farming

Gender-disaggregated data reveals that while both men heads-of-households and women heads-of-households in a particular neighbourhood are active in zero-grazing urban dairy farming, the women generate less income through this activity than the men. Further interpretation and analysis of this result reveals that women heads-of-households:

- use more milk for household consumption than for sale and have less time available to sell milk at the market due to other income-generating and subsistence activities (male heads-of-households draw upon the labour of their wives);
- own livestock of poorer quality and health which results in lower milk production (some women have lower income and socio-economic status than the men, therefore, poorer zero-grazing conditions and less access to veterinary and extension services); and
- have less bargaining power due to social notions of women’s place in the home and have not been successful in forming relationships with (largely male) suppliers of livestock in urban markets.

Without gender analysis, researchers can overlook the inequities inherent in this particular urban dairy farming system. Data analysis may have revealed that “dairy farmers” were producing and selling an adequate amount of milk and contributing to household income. Resulting conclusions and recommendations would have overlooked women heads-of-households’ specific needs and interests in urban dairy farming.
## Gender & Urban Agriculture Issues List: Key Questions to Consider

### Division of Labour
- Who are the urban farmers?
- What is the division of labour in the household with regards to food security (e.g. growing, collecting, trading, shopping, preparing, and distributing food)?
- How much time is spent on each UA related activity?
- Who helps the main person responsible for feeding family members (e.g. children of what age/sex; older people)?
- What roles do male/female children play in the household? How much of their time is spent on securing food and/or generating income? What activities are children involved in?
- Who holds knowledge in the household related to food security?
- Who operates emergency food and seed banks in case of natural disasters?

### Economic Factors
- What income bracket does the household belong to?
- What employment activities are male/female household members involved in?
- Are men’s/women’s employment activities formal or informal?
- Are there barriers to entry for new UA producers? If yes, who is excluded and why?
- Does seasonal unemployment occur for household members involved in UA?
- What sources of income are invested in food production?
- Is income derived from UA and/or non-UA products?
- Are male/female household members literate? What is their educational background? How much time do male/female children spend in school?
- What vocational training have male/female household members received (e.g. business planning, negotiating bank credits, food processing, preservation and packaging)?
- Who controls funds derived from income generating activities? How is income used and spent within the household? Who make decisions concerning the household budget? How much time is spent managing the household budget?

### Resources
- What economic inputs, services and resources for UA do men/women have access to and control over (e.g. land, equipment, tools, labour, cash/credit, employable skills, employment opportunities)?
- What political resources do men/women have access to and control over (e.g. organizations, leadership, education, information, public sphere experience, self-confidence, credibility)?
- What are the implications of this division for achieving UA-related goals?
- What benefits do men/women receive from the use of these resources?
- How are men/women affected by shortages/surplus in a particular resource? How does this affect division of labour and time commitments to various activities?

### Food Sources
- Where does the food come from (e.g. garden, market, common/individually held plot, allotment)?
- How does the combination of food sources vary from season to season throughout the year?
- Where do household members garden, cultivate, raise animals, fish, etc.?
- Who owns the land used for UA? Who controls the land and water sources? Who has access?
- What relations exist between male/female landowners and male/female farmers?

### Time Management
- How much time is spent on gardening, animal husbandry, pisciculture, etc.?
- Who spends how much time doing what activity?
- Is there a conflict of activities due to time shortages? What activities specifically?
- What situations or problems arise on account of such conflicts? (e.g. children taken out of school to help with household chores; ill-health suffered by men/women due to large workload)
- What alternatives exist regarding such conflicts?
- Who plays what role in the decision-making and/or conflict-resolution process?
### Nutrition
- How has household nutrition been positively/negatively affected by involvement in UA? Does this impact vary from season to season throughout the year?
- Who has benefited (e.g. male/female children)?
- To what extent do various factors explain the practice of UA and its benefits on household nutrition (e.g. family size, head-of-household, employment status, income, education, length of time farming, land)?

### Technology
- What technology is used to produce and prepare food?
- From where has this technology been derived?
- Who uses this technology? Who is excluded and why?
- Who manufactures tools required for UA activities (e.g. pens for poultry rearing)?
- How are household members affected by the rate of return for these activities?
- What portion of the household budget is spent on technology? Where does the household acquire these financial resources?
- Whose skills will be enhanced by training and/or extension services?

### Information & Community Networks
- Who has access to information on UA activities (e.g. new technologies, growing methods)?
- What UA cooperatives exist? Are these informal networks or formal groups? Who are the members? How are responsibilities, activities, decision-making processes, and revenues divided amongst male/female cooperative members?
- What NGOs, CBOs or other associations assist urban farmers (e.g. inter-farming group cooperation, public/private partnerships)?
- What is the gender composition of organization staff and leadership?
- Who are these services targeted for (e.g. men/women heads-of-households, children)?
- Has there been any formal resistance/activism concerning urban farmers’ rights? Who was or was not involved? What was the platform?

### Waste and Open-Space Management
- What roles do men, women and children play in natural resource management (e.g. waste disposal, firewood collection, water collection, beautification)? How much time is spent on each activity?
- Are responsibilities and roles shared on a rotational basis?
- Who controls and/or has access to what resources in the urban environment? What gender related constraints exist?
- What quality of resources do men/women have access to and control over?
- What distance are men’s/women’s resources located in relation to the homestead?
- Who is responsible for organic recycling (e.g. composting)? Why?
- Who does inadequate sanitation or untreated wastewater impact? How?
- What is the impact on gender of on-site vs community-based waste treatment systems?

### Governmental and Legal Structures
- Does the municipality or national government support/manage UA? How exactly (e.g. clearing land of waste, allowing free access, discouraging invasion and/or harassment of farmers)? What levels of support/management? Which forms of UA? Are these forms dominated by male/female practitioners?
- What is the sectoral entry point (e.g. community kitchen, street foods, nutrition/health, youth activities)?
- What bi-laws or state laws exist that prohibit or encourage UA?
- Is female leadership prominent in municipal or government structure? What role does this play in supporting or empowering female UA practitioners specifically?
- Does the municipality or national government recognize the contribution of female UA practitioners? What form has/des this recognition take?
- What is the governmental policy regarding land tenure (e.g. benefits men/women)?
- How do government policies affect availability of and access to natural resources for UA practitioners?
- What government protection is offered during periods of seasonal unemployment?
- Are there cultural norms/legal frameworks limiting men’s/women’s access to resources & opportunities?
- What public services are provided in terms of training or education? Who are services targeted for?
- Do government authorities engage in dialogue with urban dwellers? How exactly? Who has a voice?
TOOL #2     Gender Activity Analysis

Objective
To explore how UA activities are distributed according to gender at the household and local level.

Data Collection
The gender activities analysis chart can inform the drafting of questionnaires and interview questions for individuals or focus group discussions. Participants can identify those activities in which they are actively or partially involved. They should also note the time spent on each activity, how often it is performed, and the location of the activity. Along with being disaggregated by sex, data should be further disaggregated by other variables such as class, race, ethnicity, head-of-household, age, religion, and so on, in order to accurately understand and document the socio-economic and gender dynamics of a particular UA system.

Researchers can also review these activities prior to being participant observers in a local neighbourhood or community. Researchers should do their best to ensure that they accompany a farmer on his/her “typical” daily routine, rather than one that may be staged.

This tool may also be used in a participatory exercise. For example, line-up three large drawings of (a) a man (b) a woman (c) a man and woman. Below these drawings scatter small cards depicting various kinds of UA activities. Include some blank cards so that participants can add activities. Ask the participants to sort the cards by categorizing them under the three large drawings in columns, according to whether the task is generally performed by a man, a woman, or both. (Only those activities shared equally 50-50% by men and women are put under the drawing of both; otherwise they should put the picture under either the man or the woman to indicate who has majority responsibility for this activity).

Key questions to consider:

- How exactly are men/women/children involved in specific UA activities?
- How do men’s/boy’s workloads compare with women’s/girl’s workloads?
- How does the task distribution of UA activities differ in men/women-headed households?
- Which are the most burdensome tasks? Who is responsible for these tasks?
- Who is responsible for reproductive tasks in the household? Productive tasks?
- What UA activities take priority in times of financial or time constraints? Who is responsible for these activities?
- How much flexibility is there in changing the workloads of men/women? Sharing tasks?
- Do men/women engage in or rely on social networks to share burdens and workloads (e.g. sharing of equipment/tools, sharing of child rearing responsibilities)?
- What are the busiest periods of the year for men/women? Boys/girls?
- What is the relationship between surplus/shortages of resources and men’s/women’s responsibilities?

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3 This participatory example based on activity analysis tool from FAO, no date.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Women/Girls</th>
<th>Men/boys</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Garden cropping</strong> (this section may be further disaggregated by crop-type)</td>
<td>finding plot securing plot (e.g. building fence) clearing plot guarding plot levelling finding seeds preparing seeds sowing transplanting weeding plowing finding water source irrigating fertilizing threshing pest control harvesting bundling packing processing cleaning storing negotiating with municipal officials transporting produce to market selling produce from home/at market interaction with extension workers sharing information with other farmers assisting neighbours with UA plots</td>
<td></td>
<td></td>
<td>Location specifies where an activity is being performed (e.g. homestead, market, field, animal pen, shop, community centre), the distance and travel time associated with an activity, and reveals factors associated with mobility of individual household members.</td>
</tr>
<tr>
<td><strong>Animal husbandry</strong> (this section may be further disaggregated by livestock-type)</td>
<td>finding plot clearing plot building enclosure cleaning &amp; maintenance of stable, etc. vaccinations veterinary services feeding watering milking slaughtering purchasing animals disposal/reuse of manure pest control negotiating with municipal officials aquaculture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>collecting firewood collecting water collecting wild fruits/veg, nuts, herbs cooking processing fibres, dyes (arts &amp; crafts) cleaning sweeping washing laundry disposing of household water child care care for elderly care for infirm land management (renting out plots)</td>
<td></td>
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</tbody>
</table>
Data Interpretation & Analysis
Further interpretation and analysis of gender-disaggregated data will reveal the interconnectedness between the activities of men and women and the functioning of the UA system as a whole. It is important to accurately understand and document the activities of men and women urban farmers in order to assess why a UA system functions as it does, and what implications the division of labour has on men's and women's roles, responsibilities and obligations in a particular context. Eventually, gender analysis of activities can inform potential technology and policy options that will benefit both men and women urban farmers. The following UA Scenario illustrates how activity analysis may be applied in a particular context:

**UA Scenario #2: Household production of urban agriculture crops**

An initial survey of production of UA crops reveals that households are producing cassava, corn, watermelons, peppers and okros. Gender-disaggregated data further reveals that men produce okros, while women are responsible for the production of all other crops. Interpretation and analysis of this division of labour reveals that women produce cassava, corn, watermelons and peppers largely for home consumption. Women cultivate peppers, for example, because it requires little maintenance and produces over a long period. The household division of UA crops is such that in being responsible for lower maintenance crops, women have more time to spend on their household tasks, such as cooking and cleaning, in addition to their UA tasks. Women are not likely to become involved with okros cultivation due to the greater time constraints and activity conflicts this high-maintenance crop generates. Men, because they are not responsible for household tasks, grow okros which requires more work than some of the women's crops but pays better on the urban market. In this household UA system, men are responsible for UA crops for income-generation and, in turn, the money generated through this activity. Women contribute to household food security and nutrition due to the variety of crops they produce. Technology and/or policy interventions stemming from this research should consider both profitability and nutrition as measures of food security. Interventions that encourage both men and women to participate in okros may, in fact, lead to a decrease in nutritional well-being amongst household members.

UA Scenario #2 adapted from Ofei-Aboagye, 1997:5.
TOOL #3 Gender Resource Analysis & Mapping

Objective
To explore how UA resources are distributed according to gender at the household and local level.

Data Collection
The list of UA resources can inform the drafting of questionnaires and interview questions for individuals or focus group discussions. Participants can identify those resources they have access to, when these resources are available, who controls or owns the resource, where it is located, the quality of the resource, how often the resource is used, and the amount of time spent on each resource. Along with being disaggregated by sex, data should be further disaggregated by other variables such as class, race, ethnicity, head-of-household, age, religion, and so on, in order to accurately understand and document the socio-economic and gender dynamics of a particular UA system.

Researchers can also review these resources prior to being participant observers in a local neighbourhood or community. Researchers should do their best to ensure that they accompany a farmer on his/her “typical” daily routine, rather than one that may be staged.

Participatory exercises can also be used to collect data on UA resources. For example, place the three large drawings of (a) a man (b) a woman (c) a man and woman in a row. Underneath these drawings scatter the smaller cards, each picturing a different UA resource. Include some blank cards so that participants can add resources. Ask the participants to sort the cards by placing them under the three large drawings, depending on who uses the resource. (Only those resources used or controlled equally 50-50% by men and women are put under the drawing of both; otherwise they should put the picture under either the woman or the man to indicate who has majority use or control). Facilitate the discussion among the participants about why they made the choices they did. Then put the second set of drawings and cards on the ground, close by to the first set. Repeat the exercise but this time focus on who has control, ownership or decision-making power concerning each resource. Again, facilitate the discussion among the participants about why they made the choices they did. Ask the participants to compare the way they have arranged the two sets of Resources Picture Cards.

Key questions to consider:

- What are the main land tenure structures/water sources? Who makes decisions about who can use these resources? Who owns the land? Who controls water access?
- What resources are (un)used? Which are degrading/improving?
- Is land available for a waste treatment plant? Who has access to this land and the potential resource?
- Which resources do men/women have access to?
- Are the rights of access to resources different for men/women or for people from different ethnic or socio-economic groups? For male/female-headed households?
- Which resources do men/women have control over?
- What quality of resources do men/women have access to and control over? How does this affect the time spent on and distances travelled to these resources?
- What are the linkages between men’s/women’s labour and their use and control of resources?
- How does increased/decreased availability of one resource alter men’s/women’s use of and control over the other resources? Is men’s/women’s workload increased/decreased as a result?
- Is it men/women who use credit? Who makes the decisions on credit use? What are men’s/women’s experiences with credit?
- What is the resource use and decision-making pattern in female-headed households vs male headed-households?

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4 This participatory example based on resource analysis tool from FAO. No date.
# Gender Resource Analysis Chart

<table>
<thead>
<tr>
<th>Resource</th>
<th>Women/ Girls</th>
<th>Men/ Boys</th>
<th>Time</th>
<th>Location</th>
<th>Access</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>physical landscape</td>
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<td>- hydrological units</td>
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<td>- drainage systems (drains, water logging, salinity)</td>
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<td>- agro-ecological zones (soil, slope, elevation)</td>
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<td>- arable &amp; non-arable land</td>
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<td>- urban forest (fuelwood)</td>
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<td>- aquaculture ponds</td>
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<td>- livestock areas (pens, grazing stalls)</td>
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<td>- crop varieties</td>
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<td>water</td>
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<td>- water pump or well</td>
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<td>- irrigation systems</td>
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<td>waste</td>
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<td>- garbage dump</td>
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<td>- compost areas</td>
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<td>- latrines, septic tank</td>
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<td>- trickling filters</td>
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<td>- houses, buildings</td>
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<td>- concrete areas</td>
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<td>- community centre</td>
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<td>- meeting places for cooperatives, groups</td>
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<td>- urban market</td>
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<td>- informal loans (friends, neighbours)</td>
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<td>- livestock</td>
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<td>- fertilizer</td>
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<td>- tools (shovels, hoes, etc.)</td>
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<td>- building materials (for animal pens, fences, etc.)</td>
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<td>Information, training &amp; knowledge</td>
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<td>- extension services</td>
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<td>- veterinary services</td>
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<td>- informal social networks</td>
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<td>- community groups</td>
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<td>- information centres</td>
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<td>- non-governmental organizations</td>
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<td>- social services (municipal)</td>
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<td>- knowledge of market, technology, production, processing, preservation</td>
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</table>

- Time allocation specifies what percentage of time is allocated to each resource and delineates daily, monthly, yearly or seasonal resource use.
- Location specifies where each resource is used (e.g. homestead market, field, animal pen, community centre, shop), the distance and travel time associated with a resource, and reveals factors associated with mobility of individual household members.
Another method that may be used for collecting data on the resource base of a particular UA system is gender resource mapping. A gender resource map can be used to represent either one household or individual household members. A researcher can start by asking the participant(s) to identify a central and important urban resource and note this on the map. Then ask the participant(s) to draw other resources on the map that are important in their particular UA system. The participant(s) should not be interrupted unless they stop drawing, in which case questions can be asked such as whether there is anything else of importance that should be added. Participant(s) should also estimate the distance of each resource from the homestead, how often the resource is used, and the travel time associated with the resource. This information can be marked on the map and delineates mobility and labour time associated with each resource. Then ask participants to identify on the map those resources they have access to and who controls the resource.

**UA Scenario #3: One woman’s perceptions of local resource-use for her UA activities**

- **Stream:** Irrigation for plot, men’s access & labour
- **Homestead:** Women process & cook food
- **Local Garbage Dump:** Men collect compost materials, 3 times per week
- **Public Transport:** Men, women & children have access
- **Credit Union:** Men have access to loans
- **Peri Urban Forest:** Women collect fuelwood, 2 times / week
- **Aqua Waste Treatment Pond:** Men treat domestic wastewater & apply on peri urban plot
- **Household zero-grazing livestock pen:** Men keep dairy cows, women sell milk at market, men control profit, women keep chickens for eggs & sell
- **Garden Plot:** Women plant tomatoes, squash & sell at market for profit
- **Local Market:** Women sell fresh produce & control profits, men purchase seeds & livestock
- **Women’s Compost Group:** Produces fertilizer for neighbourhood plots
- **Women’s Compost Group:** Produces fertilizer for neighbourhood plots
- **Water Pump:** Women collect water, 3 times per week
- **Community Centre:** Men/women have access to extension services, tools & equipment
- **Vet Services:** Men have access to veterinarians for dairy cattle

1km

10km

1.5km
Data Interpretation & Analysis
The flow of resources is a fundamental concept within an UA system. Gender-disaggregated data can provide insights into household resource distribution and decision-making power and processes. Who uses and who has control of a particular resource is dependent on larger social, economic and political factors. For example, women may have less secure access to land due to a lack of legally defined rights to land tenureship. Men who are unmarried may have less access to the labour of women and children than men who are married. Resource analysis can also point to larger institutional controls on resources, such as municipal control over transportation or control of loans/credit by private lending agencies. While men and women urban farmers may have occasional access to these resources, the ultimate control is largely beyond the control of individuals. The following UA Scenarios illustrate how resource analysis may be applied in various contexts:

**UA Scenario #4: The effects of environmental degradation on urban agriculture practitioners**

Researchers are interested in exploring the effects of environmental degradation on UA practitioners. A survey of men and women reveals that there is a decreasing amount of fuelwood, which is becoming an obstacle for food processing. Women are identified as those persons responsible for fuelwood collection - women and girls carry loads of branchwood and leaves from surrounding areas into the city. Analysis reveals that while drought is a significant factor in the decreasing supply of fuelwood, women’s use of this resource is exacerbating the problem of depletion. This has created specific problems for women in that they now must travel farther distances in order to gather adequate fuelwood supplies. In turn, women have less time to spend actually processing food for household consumption. Not only is the household receiving less nutritious food, the household budget is used to supplement foodstuffs bought from street vendors. As a coping strategy, women have attempted to use cheaper, lower quality, quick-burning biomass fuels. Unfortunately, the fuel generates more indoor pollution than fuelwood, thus compromises women’s health, and is more time consuming because it must be continually tended due to the quick-burning nature. Another coping strategy involves the removal of girl children from school to help their mothers with fuelwood collection. This impedes the ability of young women to gain a solid education. By identifying the primary users of a particular resource, and the implications of this research, we can better assess what solutions may be appropriate and sustainable.

UA Scenario #3 adapted from Haile, 1991: summary.

**UA Scenario #5: Dry season and wet season urban farming**

During fieldwork, a researcher notes that only men are involved in dry season farming. Further investigation reveals that indeed women operating as individual UA farmers engage in wet season farming, and those women working with husbands in dry season farming do mainly weeding and harvesting aspects. It is found that in addition to women having less physical strength to clear the dry season farm land, their access to hired labour or a tractor is hindered because it is too expensive (most women heads-of-households are in lower income brackets). Fertilizers and irrigation pumps are also not affordable. Because less farmers (mainly men) engage in dry season farming, there is more money made due to relatively lower supply of foodstuffs and unchanged level of demand. In speaking with the individual women farmers, a research finds that the women have recently organized a dry season farming cooperative and intend to share resources and farm a single plot of land for income-generating purposes.

UA Scenario #4 adapted from Ofei-Aboagye, 1997:5.
 TOOL #4 Perceptions of Organizations by Gender (using the Venn Diagram)

Objective
To explore the role of local, regional and international organizations through the perceptions of local men and women.

Data Collection
The list below of institutions, organization and groups can inform questionnaires whereby participants can rank the relevant organizations according to importance. However, data collection on local perceptions of institutions is best suited to individual interviews or focus group discussions through which participants’ views can be better understood and accurately documented. The list of institutions, organizations and groups can then inform the drafting of interview questions.

Researchers can also engage in a participatory exercise using the Venn Diagram. For example, make sets of different sized circles from coloured paper (four or five each of large, medium and small sizes). Make enough sets for each of the small groups you will have. Each small group divides themselves into two sub-groups: one representing women, one representing men. Participants then write the name of an organization in each circle (size of circle corresponding to the importance of the said organization). Each of the sub-groups ranks their local groups and organizations in order of importance to them, as represented by the size of the circle. Then the participants lay the circles in a configuration that indicates the relationship between and among the different community groups. Participants then discuss the results. The Venn Diagram participatory exercise can be used with both individuals or focus group discussions.

Along with being disaggregated by sex, data collected through any of the above methods should be further disaggregated by other variables such as class, race, ethnicity, head-of-household, age, religion, and so on, in order to accurately understand and document the socio-economic and gender dynamics of a particular UA system.

The following is a list of organizations that may be of significance in a particular UA system:

- cooperative
- farmers' association
- marketers' association
- garden club
- composting group
- recycling club
- extension services
- veterinary services
- credit service (bank, lending centre)
- community-based organization
- non-governmental organization
- youth league
- parents association (mother's/father's club)
- church
- school
- community centre
- community kitchen
- community daycare
- public health service
- council for community development
- local office of international NGO
- municipal authorities (Department of Housing, Department of Cooperatives, Land Office, etc.)

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5 This participatory example adapted from Rojas and Miller, 1997:71.
Key questions to consider:

- What local organizations are important for men/women?
- What types of organization are these (e.g. small cooperative, men’s/women’s group, NGO focused on agriculture)? What is their significance for men/women?
- What role do men/women play in these organizations (e.g. leadership, members)?
- Have the organizations generated positive/negative change in the individual circumstances of community members?
- Have the organizations generated change regarding gender roles and relations in the community (e.g. men/women empower themselves via knowledge and skills gained from local women’s NGO)?

Data Interpretation & Analysis

Women and men often have different perceptions of local, regional and international institutions. Women will have interest and power in groups where men do not. This is a key element within the UA system with respect to the opportunities and resources men may have that women do not, and vice versa. While data collection on local perceptions will reveal the key institutions in a particular UA system, analysis of this information will reveal why certain institutions are important and why others are not. This tool is useful in identifying and developing linkages with various institutions and for leading into multi-stakeholder consultations regarding future technology and policy interventions within a local UA system. The following UA Scenario illustrates how the Venn Diagram of local perceptions of organizations may be applied in a specific research context:

**UA Scenario #6: Assessing the effectiveness of extension services for UA practitioners**

The above Venn Diagram shows a relatively small circle representing local extension service compared to a larger circle indicating a greater importance of the local farmers’ association (men’s diagram) and the compost group (women’s diagram). During a focus group discussion men and women participants voice their concerns regarding female extension workers’ unwillingness to do field visits in a “dirty environment” and their inability to handle larger livestock such as cattle. Further gender analysis, through individual interviews with men and women, reveals that while all persons share the former concern, women UA practitioners are satisfied with female extension workers’ support in gardening and poultry activities, for which women a largely responsible in this UA system. It is the men who are frustrated with extension services related to larger livestock. This distinction is a key element in improving extension services so that it is of benefit to both men and women UA practitioners.

UA Scenario #6 adapted from Mlozi, 1995.
TOOL #5 Gender Analysis Matrix

Objective
To explore activities and resources within a particular UA system in relation to socio-cultural notions of male/female roles, responsibilities and obligations.

Data Collection
The Gender Analysis Matrix (GAM) is a combination of Gender Activity Analysis (Tool #2) and Gender Resource Analysis (Tool #3) with an added element of “culture”. Collecting data on cultural norms and expectations of men and women in society can be a sensitive and difficult process. The GAM is best suited to individual interviews or focus group discussions during which researchers can thoroughly explore participants’ perceptions of gender roles, responsibilities and obligations as influenced by cultural, legal and institutional factors. These factors may include but are not limited to:

- social roles and obligations of men/women (e.g. men as breadwinner, women as homemaker/caregiver);
- decision-making power within the household;
- legal mechanisms as based on views of men’s/women’s proper roles in society; and
- institutionalization of cultural norms.

Along with being disaggregated by sex, data collected through any of the above methods should be further disaggregated by other variables such as class, race, ethnicity, head-of-household, age, religion, and so on, in order to accurately understand and document the socio-economic and gender dynamics of a particular UA system.

Definitions for the Gender Analysis Matrix:

Levels of analysis:
- **women** refers to women of all ages who are in the target group
- **men** refers to men of all ages who are in the target group
- **household** refers to all women, men and children residing together, even if they are not a part of one nuclear family. Although the types of household may vary even within the same community, people always know what constitutes their “household” or “family”. That is the definition or unit of analysis that should be used for this level in the GAM.
- **community** refers to everyone within the project area as a whole. The purpose of this level is to extend the analysis beyond the family to society at large. However, communities are complex and usually comprise a number of different groups of people with different interests. So, if a clearly defined “community” is not meaningful in the context of the project, this level of analysis may be eliminated.

Categories of analysis:
- **activities** refers to tasks (e.g. fetching water from the river), level of skill required (skilled versus unskilled, formal education, training), and labour capacity (how many people and how much they can do; do people need to be hired or can members of the household do it?)
- **time** refers to the amount of time (e.g. 3 hours, 4 days...) it take to carry out the task associated with the project of activity (includes travel time/distance and time spent on each activity or resource
- **resources** refers to access to capital (income, land, credit), and the extent of control over resources (more or less) for each level of analysis
- **culture** refers to social aspects of the participants lives, namely gender role or status, that delineate women’s and men’s rights, expectations, obligations and responsibilities

Data Interpretation & Analysis

Adapted from Rojas and Miller, 1997:51-52.
The GAM encourages researchers to explore the underlying cultural forces, and the resulting legal and institutional structures, influencing and shaping a particular UA system. Exogenous trends and dynamic forces affect men’s and women’s roles, as well as the resources and opportunities they have access to and control over. The following UA Scenario illustrates how activities and resources within a particular UA system may be influenced by socio-cultural notions of male/female roles, responsibilities and obligations:

**UA Scenario #7: Access to information as related to cultural roles**

<table>
<thead>
<tr>
<th>Activities (refer to Tool #2)</th>
<th>Time</th>
<th>Resources (refer to Tool #3)</th>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UA Activities: collecting water and fuelwood; planting of crops; tending to daily care of garden/plot; harvesting; preparing food; selling produce at market; preparing compost...</td>
<td>child-rearing (all day); meal preparation (2hrs); fetching water (1hr); collecting fuelwood (1.5hrs); selling produce at market (3hrs); working in garden (2-3hrs); networking (1hr); composting (.5hr)...</td>
<td>own labour; water from public tap; fuelwood from peri urban area; loan from women’s organization; information on UA techniques from women’s organization</td>
<td>women viewed as primary care-givers, including food providers; women prohibited land ownership due to traditional legal structures</td>
</tr>
<tr>
<td>Other Activities: child-rearing; income-generating via arts and crafts...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UA Activities: scavenging in garbage dump for compost materials; preparing plots; applying fertilizer...</td>
<td>scavenging (2hrs); plot preparation (6hrs-varies depending on season etc); resting...</td>
<td>own labour; seeds from local agriculture group; land ownership (e.g. 2 plots in peri urban area)</td>
<td>majority tend to be formally employed while women expected to tend to household and homestead needs</td>
</tr>
<tr>
<td>Other Activities: part-time work as bus driver...</td>
<td></td>
<td>information exchange with local university students</td>
<td></td>
</tr>
<tr>
<td><strong>Household</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>roles and responsibilities are fixed all year round</td>
<td>time commitments to activities is adjusted depending on household budget (e.g. cash shortage = more selling of produce not consuming)</td>
<td>children’s labour</td>
<td>decision-making roles fluctuate between male, female members (e.g. women control household budget for school fees, food; men for tools...)</td>
</tr>
<tr>
<td>children (girls) may be asked to help when a lot of work to be done</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Community</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>community UA plot—each person required to help with various tasks</td>
<td>2hrs per week per member</td>
<td>support from local NGO (e.g. seeds, equipment, loan)</td>
<td>women’s role as food provider means they tend to do more work on community plots &amp; do the composting</td>
</tr>
<tr>
<td>composting in neighbourhood</td>
<td></td>
<td>compost contribution from garden of each participant</td>
<td></td>
</tr>
</tbody>
</table>

In analyzing the above data, researchers can focus on some or all of the information gathered. For example, the GAM reveals that men in this particular context have access to information via local university students (see highlighted data). These students visit numerous neighbourhoods within the city and share experiences and techniques with urban farmers. The participants stressed that the relationship was one of exchange of knowledge. Researchers noted, however, that none of the women UA farmers appeared to have participated in these sharing relationships. While reasons were not volunteered from the participants, researchers deduced that the students who came were male and women felt more comfortable having local men speak with the students. The women were not inclined to speak with the male students because they were male strangers. While the cultural customs do not frown on women talking to men, customs do not extend this to strangers.

UA Scenario #7 adapted from Ofei-Aboagye, 1997:8.
Objective
To explore power-relations, decision-making processes, and distribution practices of the products of a household’s labour.

Data Collection
A gender benefit analysis chart can be used to inform the drafting of questionnaires. However, data collection on benefits analysis is best suited to individual interview or focus group discussions through which participants can further expand on their views and perceptions of household dynamics. Researchers can use the chart below as a guideline to interview sessions or can engage in a participatory exercise to fill in the various categories.

As a participatory exercise for gender benefit analysis, index cards are used to facilitate a discussion with household members about who has access to the products of a household’s labour and who decides how products should be used. A different set of index cards is made for each family interviewed, based on information from their corresponding Gender Activity Analysis (Tool #2) and Gender Resource Analysis (Tool #3) data. A representative set of products and by-products of the household’s various livelihood activities is written on the cards (e.g. tree (by)products include fruit, fodder, fuelwood, lumber, bark, and poles). The cards are dealt to adult family members who take turns reading the cards and describing who in the family or community uses the (by)product, how it is used, who decides how it should be used, and who controls the money if sold. If the member does not have knowledge of the (by)product, the card is passed to the member who does. Additional input is sought from other household members. UA Scenario #7 illustrates the possible data collected through this exercise.

Along with being disaggregated by sex, data collected through any of the above methods should be further disaggregated by other variables such as class, race, ethnicity, head-of-household, age, religion, and so on, in order to accurately understand and document the socio-economic and gender dynamics of a particular UA system.

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UA Scenario #8: Gender Benefit Analysis Chart of a fruit tree

**By-Products:**

(i) leaves  
women collect fallen leaves & use in compost to produce fertilizer for crops on women’s/men’s plots

(ii) fruit  
women use for home consumption (eat boiled, fried, baked)  
men sell surplus at market & use profits to buy seeds for cash crops

(iii) flower  
women use for home consumption but mainly sell at market & use profits for children’s school fees

(iv) trunk  
men shave into pig feed  
women use pig feed for keeping pigs

(v) sprouts  
women transplant onto kitchen garden plot  
men sell at market & use profit for household food budget

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Data Interpretation & Analysis
The flow of benefits (including cash and goods) generated through household labour is a fundamental

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7 This participatory example adapted from Thomas-Slayter, 1993:25-26.
concept within an UA system. Analysis of income distribution, ownership of assets, social exchange of goods, and home consumption of food produce provides insight into power structures and relations between male and female household members. The following UA Scenario illustrates how gender benefit analysis may be applied in various contexts:

UA Scenario #9: Benefits of urban vegetable production

Benefits from vegetable production in a local UA system, as defined by UA practitioners, are considered earnings and decision-making power over these earnings. Researchers found that on the whole, men earn more from vegetable production because of their larger holdings and ability to do two farming seasons - both wet and dry. Men who farm with their wives save on labour costs, produce greater crop yields, and have complete control over how profits are allocated. Those crops produced by men fetch more per acre at the local market, as compared to women’s crops which are more fragile and perishable. In those households where only the wives produced vegetables, women have more control over income generated than women farming with their husbands. Interviews with the wives revealed that, in some cases, husbands not involved in vegetable production may impinge on women’s benefits (i.e. cash) from this activity. Rather than give the profits to their husbands, women vegetable producers use strategies based on their social role as mothers to keep cash to purchase household needs. Researchers found that women producers who are not landowners demand their share of revenue derived from production because they are the ones who are primarily responsible for the care of children. However, when they are not successful in convincing their husbands to share earnings, women retain part of the money from their vegetable produce sales without the knowledge or consent of their husbands. While still in the marketplace, women entrust their earnings to money managers (e.g. floating banks), women friends, their own children, or will simply deposit the cash in a hiding place where men are not likely to search (e.g. in a kitchen pot or pan for this is culturally associated with women’s domain).

TOOL #7  Problem Analysis

Objective
To explore the causes and effects of different problems related to an UA system, as identified and expressed by men and women UA practitioners.

Data Collection
The problem analysis chart can be used to inform the drafting of questionnaires. However, data collection on problem analysis is best suited to individual interview or focus group discussions through which participants can further expand on their views and perceptions of specific problems and obstacles to UA activities and resources. Researchers can use the chart below as a guideline to interview sessions or can engage in a participatory exercise to fill in the various categories.

As a participatory exercise for problem analysis, organize two separate groups: one of women and another of men. Alternatively, these groups may be further divided along the lines of age, ethnicity, class and so on. Ask the participants to think about their problems. In discussion, ask them to list the six (6) problems that are most important to them. Rank the problems according to importance. Prepare the Problem Analysis Chart listing down the far left column the priority problems identified by each of the different groups. Where a problem has been identified by more than one group, list the problem only once. In the second column, list the causes of the problems as identified. Then ask people to explain what they currently do to cope with their problems. List the coping strategies in the third column. Finally, with specific reference to each problem discuss opportunities for improvement asking both the local community members and outside experts to contribute to their ideas. List the solutions in the fourth column.

Key questions to consider:

- What are the priority problems identified by men/women/both?
- What are the problems identified by different groups (based on age, ethnicity, class...)?
- Who are the stakeholders in a potential development project (based on uptake of research results)? How big is their stake?
- Did the representatives of local organizations etc. identify additional causes of problems? What are they?
- What are the current coping strategies of men/women to each problem? What are the gender implications (e.g. women go further and further to fetch water)?
- What are the opportunities to solve the problems as suggested by men/women/both? Suggested by representatives of local organizations, etc.?
- What are the solutions that can be implemented locally? Which require external help?
- How will the proposed solutions change existing gender dynamics (e.g. men’s/women’s activities, access to/control over resources, benefits of labour, etc.)?
- What are the technical constraints faced by men/women farmers? What are the opportunities for technical improvement in current UA practices?
- What are the organizational constraints faced by men/women farmers? What are the opportunities for organizational improvement in current UA practices?
- Do all farmers have adequate and equitable access to resources required for UA activities? If not, which group of farmers does not have access? Why? How could this be solved?
- What are the arrangements for the operation and maintenance of equipment and technology? Do these work? Why or why not? If not, how should these arrangements be changed?

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8 This participatory exercise adapted from FAOb, no date.
Data Interpretation & Analysis
Applying gender analysis to problem identification is a fundamental step in making recommendations for appropriate, sustainable, and equitable technology and policy interventions. A problem initially may be identified as a problem for one gender but have implications for other household members or other households in a neighbourhood. The following UA Scenario illustrates how gender analysis can be applied in a problem analysis exercise:

**UA Scenario #10: Problem Analysis Chart of a group of men & women in an urban area**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Causes</th>
<th>Coping Strategies</th>
<th>Resulting problems</th>
<th>Solutions &amp; Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT ENOUGH LAND FOR UA</td>
<td>1. UA considered illegal&lt;br&gt;2. women have no rights to land tenure&lt;br&gt;3. rapid urban expansion - vacant land used for construction of buildings etc.</td>
<td>men &amp; women using land in peri urban areas</td>
<td>1. long distances to vacant plots for women&lt;br&gt;2. only marginal land available for women (therefore poor yields &amp; environmental degradation)&lt;br&gt;3. men &amp; women still subject to harassment from municipal authorities</td>
<td>lobby municipality to legalize &amp; support UA</td>
</tr>
<tr>
<td>INADEQUATE WATER SUPPLY</td>
<td>1. drought (rationing of water)&lt;br&gt;2. 1 local pump with poor water quality&lt;br&gt;3. staggered supply of water by municipality</td>
<td>women buying water from market vendors</td>
<td>1. more household $ spent on water - women in charge of budget&lt;br&gt;2. not enough water for UA crop irrigation - men’s activity</td>
<td>increase use of grey water for irrigation (technology to be managed by women and applied by men)</td>
</tr>
<tr>
<td>CATTLE TOO EXPENSIVE</td>
<td>1. shortage of cattle on urban market</td>
<td>men travel to rural areas to purchase cows&lt;br&gt;goats used for milk production by women</td>
<td>1. men away from household for long periods thus less $ brought in by men&lt;br&gt;2. livestock activities (once male) now women’s responsibility (in charge of small animals, e.g goats)</td>
<td>men to form cooperative in order to share available cattle and resulting milk production for household consumption and sale</td>
</tr>
</tbody>
</table>

By analyzing the above problems identified by men and women of a particular urban area, researchers find gender differentiated impacts of problems, coping strategies and potential solutions. For example, the lack of land poses a specific problem for women UA practitioners. While both men and women face constraints due to the illegal nature of UA, women are further disadvantaged because they traditionally few rights to land tenure. As such, men tend to have first choice of any available vacant land suitable for UA. This often leaves women with low-quality plots of land that are located at a considerable distance from the homestead. The solution for increasing access, as identified by the group, may improve access to land for UA practitioners in general, however, it will not address the issue of inequitable access to urban land between men and women. The problem of expensive livestock may initially be considered a problem for men. Yet, women are also burdened by a lack of cattle, for when goats are substituted as milk producers it is women who now tend to this UA activity according to the social division of labour in this particular context. An appropriate solution identified by the women in this group calls for the men to form a cooperative and share in urban dairy farming activities.
Gender Analysis in Urban Agriculture Research
Stage 3: Monitoring & Evaluation

Objective
To provide CFP team members with an overview of gender issues to be considered in assessing the implementation of gender analysis within an UA research project.

Format
Gender guidelines for monitoring and evaluation are presented as questions and are organized along eight key indicators as identified in the Evaluation Framework of the CFP Program Summary 1997-2000. Researchers will be provided with these gender monitoring and evaluation guidelines prior to or during the initial project design and formulation so as to inform the project for its duration. CFP team members will refer to the below list of gender evaluation guidelines in assessing how exactly gender analysis has been implemented by the project team and how effective this process has been on enhancing overall research results.

The below list is not inclusive and should not be used as a rigid tool. Not all issues are necessarily relevant to all UA research projects. CFP team members and research partners are encouraged to draw on those issues from the list that are relevant to and appropriate within a particular context. Similarly, CFP team members and research partners are encouraged to explore gender and UA issues that are not found on the list.
Gender Monitoring & Evaluation Guidelines for Urban Agriculture Research Projects

1. Human resource development
   - Has the research team been able to adequately address relevant gender issues?
   - Has the research team increased their knowledge of and skills regarding gender?
   - Was there consultation or collaboration with a gender resource person? What form did this take place? Was it deemed successful? By whom?
   - Has the research team responded favourably to the inclusion or expansion of gender analysis within the project? What difficulties and/or successes have the research team had?

2. Institutional capacity building
   - Has the institution improved in its ability to adequately address gender issues?
   - What factors have allowed for this improvement? What obstacles exist?
   - Has the institution held any training or workshops on gender?

3. Effective local partnerships
   - Has the project facilitated linkages with local men’s/women’s organizations? How exactly?
   - What resources were provided by such partnerships which enhanced gender analysis?

4. Gender analysis
   - What specific issues have been explored through gender analysis?
   - How was gender disaggregated data collected? By whom? Who informed this portion of the research (e.g. local men/women/children)?
   - How has this analysis informed the conclusions and recommendations stemming from the research?
   - Were the results shared with the participants? What were their reactions to the analysis on local gender dynamics?

5. Added value of multi-disciplinarity
   - How has gender analysis contributed to the multi-disciplinary nature of the research?
   - Has gender been approached as a discipline in its own right or has gender been used as analytical tool that cuts across all disciplines?

6. Scientific and methodological advances
   - Has the exploration of innovative design, implementation, evaluation and transfer of UA practices included gender analysis?
   - Have the impacts of such advances been analyzed from both men’s and women’s perspectives?
   - How will such advances impact or change existing gender dynamics? Are these impacts or changes positive/negative? For whom are they positive/negative?

7. Research utilization
   - Will the uptake of results benefit local men and/or women? How exactly?
   - Will future development activities recommended by the project be informed by conclusions regarding local gender dynamics?
   - Will the research be disseminated? How exactly? With whom will the results be shared?
   - Will efforts be made to share gender analysis aspects of the research? With whom (e.g. policy makers, NGOs, other communities, other researchers)? In what form?
   - Will efforts be made to influence policy makers through uptake of gender research results? How exactly?

8. Fund leverage
   - Has the amount of project funding been adequate to support gender analysis? Why or why not?
   - Has any parallel- or co-funding been identified by researchers for enhancing gender analysis in future development research on UA? From what source? What amount of funding? How will this funding be utilized?

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Section 3:

Annotated Bibliography on Gender and Urban Agriculture
Annotated Bibliography on Gender and Urban Agriculture

Introduction
The purpose of this annotated bibliography is to provide an overview of concepts, theories, and research conducted in the field of gender and urban agriculture (UA). It includes those texts which contribute to the field by explicitly exploring and analyzing gender dynamics, and the roles, responsibilities, and obligations of men and women in urban agriculture systems. UA is defined as an activity that produces, processes and markets food and other products on land and water in urban and peri-urban areas, applying intensive production methods, and (re)using natural resources and urban waste. The concept of gender has been expanded to include those texts that consider specifically women’s experiences in UA, along with texts exploring gender dynamics.

Bibliographical references were collected over a period of nine months using numerous methods, including database searches, use of the Internet, and word-of-mouth. The latter was most successful, for many of the references do not appear in general key word searches owing perhaps to the diversity, scope and newness of the field. Bibliographical references are arranged alphabetically according to author. Each reference includes a brief abstract and key words to highlight the relevance and significance of a particular article, paper or book for research on gender and UA. Abstracts do not necessarily reflect the true nature of the arguments and findings of research. In some cases, gender issues are not a central focus, however, insights provided on gender dynamics are significant and the reference has been included. Where possible, abstracts include verbatim text so as to accurately reflect the authors’ objectives, viewpoints and vocabulary. While no personal commentary is included, abstracts should be considered this author’s own interpretation. An author index, geographical index, and key word index are provided at the end of the bibliography. Key words highlighting the general themes were selected by this author based on key words cited in International Development Abstracts (Issue 6 and Index November/December 1997).

General Observations
The general trends in the literature reflect the nature of the field and the extent to which research on gender and UA has developed over the past two decades. Of the ninety-one bibliographical references, seventy-three have been published between 1990 and 1998. This points to the growing interest in, and the recognition of, the relevance and significance of gender issues in urban agriculture systems. Of seventy-six identifiable authors, thirty-two are male and forty-four are female. This is telling of the relatively equal participation of men and women researchers and authors in the field of gender and UA. The balance becomes much more skewed when considering the geographical scope of the research. There is a significant concentration on the African context with sixty-three references focusing on this region. Of these references, research is largely focused on the countries of Kenya, Mozambique, Uganda, Zambia and Zimbabwe, all of which are found in five or more references. Six references focus on Asia, six on Europe, five on Latin America, one on the Middle East, and two on the Pacific Islands. It is difficult to assess exactly why Africa geographically predominates in the literature on gender and UA. It is possible that the nature of the bibliographical searches simply did not

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unearth these other sources. However, this begs the question, if the sources exist, why are they so difficult to find for contexts such as Latin America and Asia? Nevertheless, a considerable amount of data, insights and knowledge exists regarding gender and UA in the African context. The remaining geographical contexts present an opportunity for further research and inquiry.

**Analysis**

There are several themes that emerge from the literature, and contribute to the understanding of gender issues in UA systems. A dominant theme is the depiction of women’s roles in UA. Research clearly shows that women perform numerous vital roles directly related to UA activities. Women actively participate in urban gardening, food processing and marketing, and waste recycling and (re)use as a means of both income-generation and food production for home consumption. In fact, women predominate in UA systems found in many regions, including Kenya, Mozambique, Poland, Senegal, South Africa, Tanzania, Thailand, Uganda, Zambia, and Zimbabwe. Furthermore, research reveals the ingenuity and determination with which women urban farmers pursue various survival strategies in order to achieve household food security. Much of the research, for example, highlights community activities and cooperative organizations through which women successfully pool resources, skills, information, time and energy into UA.

A predominant assumption in the literature is that UA is a positive factor contributing to women’s ability to perform the gender roles for which they are primarily responsible, namely food provision and general household well-being. UA allows women to use cash income on items other than food purchase, and extra income generated through UA activities contributes to the household budget. UA also provides sources of food that are not subject to market fluctuations and provides nutritious, fresh produce. This is especially significant for the most marginalized socioeconomic groups, such as women heads-of-households, elderly women, or those families with many children.

Beyond depicting a mutually-beneficial relationship between women and UA, the literature points to the obstacles and hindrances facing women urban farmers. Due to economic status, education levels, and cultural factors, women tend to have poor access to and control over productive land, sources of credit, and agricultural inputs. Women also tend to lack household decision-making power, political clout, relevant skills and information, and face time constraints due to their multiple roles. Several recommendations are made by researchers for potential intervention strategies aimed at enhancing women’s ability to participate in UA activities. Researchers call for a greater recognition of women’s roles in UA. They urge for thorough examinations of both women’s experiences and gender dynamics in UA research, as well as urban policy and planning. Suggestions include incorporating women’s needs and input directly into the design and planning of urban infrastructure and services, involving women in decision-making and management positions, providing technical and educational support, providing extension services, and improving land-use planning.
One of the more provocative issues highlighted in the literature concerns the reasons for the lack of attention paid to women’s contributions to household food security through UA. Many researchers contend that more value has been placed on food production for exchange value than for subsistence use. In almost all cases, women predominate in subsistence UA production. Women also participate in income-generating UA activities. However, often when UA activities become commercial enterprises, it is the men who take over food production and general management of plots while women are relegated to food processing. This tendency speaks to the social values placed on women’s work versus men’s work. A focus on income-generation more so than subsistence food production may in fact be a contributing factor to the marginalization of women’s experiences, needs and interests within development research on UA.

The literature clearly contributes to the understanding of the roles of women in UA activities and household food security. However, gaps in the literature leave much unexplored in the field of gender and UA. In some cases, women’s role in UA continues to be analyzed in isolation from other research components, often resulting in a single sentence or paragraph which cannot adequately provide a gender analysis. While this focus on women is certainly legitimate and insightful, the relationships between men and women have yet to be adequately analyzed. Gender components in research often do not go beyond the collection of gender-disaggregated data. While this is an important step, there is a tendency to overlook the underlying power relations and structures that create imbalances and inequities between men and women. Those researchers who explore gender dynamics to this depth provide some of the most comprehensive, interesting, and thought-provoking pieces in the bibliography. Analysis also tends to be limited to intrahousehold relations. There are few cases where researchers peel back the layers to uncover the larger social, economic and political processes that influence and shape relationships between men and women, and their respective roles, responsibilities and obligations. Further research, for example, may focus on the gendered effects of urban policy, macro-economics, or cultural traditions on the organization and functioning of local UA systems.

As the field of gender and UA continues to evolve, there is no doubt that these gaps will be filled and new trends will emerge. The researchers listed in this bibliography have set the stage for highlighting the relevance and significance of gender issues in UA research. By better understanding and documenting gender dynamics in UA systems, more accurate research results are generated. In turn, these results can inform more appropriate technology and policy interventions that will have an equitable distribution of benefits for both men and women.
The objective in this study is two-fold. First, to document the proportion of persons in Kisangani involved in urban agriculture, and to which social categories they belong. Second, to explore women’s motivations for pursuing such activities. The study found that in the zones studied three out of five women cultivate food crops, many of which are married women. Also, women with children are more likely to participate in urban agriculture than those women who remain childless. Through urban agriculture, women are able to provide for their households. Many of the women are saleswomen, teachers, dressmakers, or are employed in various urban services. Problems facing women in both urban and peri urban areas include distance and transportation. The authors recommend that those organizations targeting women’s issues, social affairs, and agriculture intervene more effectively so as to offer technical and material support to women involved in urban agriculture.

Key words: Africa, Central African Republic, peri urban, income generation, women’s employment, intervention strategy


This paper explores the challenge of extending earning opportunities and access to valued social roles to young women living in a highly traditional, marginalized, and impoverished community on the outskirts of Cairo, Egypt. The paper details the role of young women in garbage collecting that, in part, contributes to and supports urban pig-keeping. For many families in the community, pig-keeping remains their largest source of income. Development work in the area has aimed to increase the skills and self-esteem of young girls. For example, a pilot project to separate garbage “at its source” has improved the quality of organic waste, meaning that pigs grow faster and are more resistant to disease. The project has improved the health of the young women garbage sorters, and has had benefits for the larger community in terms of more efficient and effective pig-keeping.

Key words: Africa, Egypt, adolescents (girls), waste collection, waste recycling, livestock, pig-keeping, development project


Key words: Africa, Mozambique, peri urban, cooperative organization, women’s organization, development project

In many countries of the developing world, particularly those in sub-Saharan Africa, women farmers must deal not only with the inherent difficulties of gender inequalities, poverty, and the vagaries of nature, but with the consequences of war and civil strife as well. This case study focuses on efforts to help women farmers to survive and prosper in the Green Zones (suburban farmland) of Mozambique, and to provide desperately needed foodstuffs for the local market. The Maputo Green Zones project was initiated by the government after the failure of the ‘people’s farms’ which were designed as a self-help approach, and it has since become a women’s organization. The General Union of Cooperatives (GUC) was established in 1983 to better serve the needs of the cooperatives operating within the Green Zones. This paper discusses how the individual cooperatives function, the role of the GUC, the development of agricultural production, training and education of cooperative members, funding and support, and the importance of
human development above economic development. The paper concludes with an examination of one specific cooperative, the Beira Green Zones Project.


Key words: Africa, The Gambia, peri urban, women’s organization, cooperative organization, horticultural production, credit, income generation, government intervention

This article briefly describes a successful peri-urban women’s horticultural project in the Gambia. In an attempt to diversify agriculture and encourage new production, the Gambian Ministry of Agriculture funded the 195-member Bakau cooperative in 1987. The success of the scheme is demonstrated, in part, by the fact that within nine weeks of first harvest the women had fully repaid their loan. Most of the produce, including chilli peppers, aubergines and okra, has been exported. The women are happy with the scheme and their income from it. The authors contend that, although small in scale, this scheme does indicate the importance and value of including women in the development process, by giving them the opportunity to participate in cash-generating agricultural projects.


Key words: Europe, Poland, gender assumptions, gender bias, subsistence production, income generation, garden cultivation, food contamination, women’s roles

This paper presents a brief introduction to the complex and formalized practice of urban agriculture through a case study of the garden allotments program in Poland with emphasis on the southwest region of Silesia. The author describes gendered assumptions about relations of urban food production that assign the non-paid subsistence, and economically invisible labour of “gardens”, predominantly to women of all ages, and sometimes also to marginalized retiree and unemployed male labour. The diminutive spatial designation of women’s urban kitchen “gardens” versus men’s work on rural “farms” is telling of the physical size of tillable space available to women. It also indicates how much more the state values food production for exchange value as opposed to non-monetary community “use” economies. Garden production, which is small-scale and more transient, therefore can be claimed negligible. As such, toxic levels of heavy metals and other contaminants in self-grown produce from industrial pollution are also claimed negligible. Women, with the social responsibility as food providers, are trapped between compromising family food provision and family health.

Key words: Europe, Poland, food contamination, women’s activism, women’s strategies

Social stability depends upon the public’s access to adequate, affordable, and safe food. Resolution of these issues occurs at the local level, typically by women. Through various kinds of food activism, local publics, especially women, buffer themselves from unfavourable policies that can result in uneven distribution or excessive prices of food. This study focuses on urbanized parts of Poland where concerns over food contamination are evolving in connection with changing arenas for public protest and a growing awareness of contamination as a problem. As an outcome of the social gendered division of labour, the public is mobilized around a broad array of food security and food safety issues largely through the activism of women. The study raises new and important questions about local strategies to define and achieve food security.


Key words: food policy, women’s roles, invisibility of urban agriculture, marginalized groups

In this paper, the subject of urban food security is defined in terms of adequate food sources, affordable food prices, available local land, food safety, and local activism by farmers and activists to define and defend local food consumption needs. It considers why urban agriculture is rendered invisible in policy definitions of food security. This, in part, relates to the scant attention paid to the issue of unpaid and unaccounted labour of marginalized groups, including women of all ages and elderly, unemployed and low income men, who most often perform local food self-sufficiency work. Society transforms problems in the food supply into women’s problems. In turn, the invisibility of the urban farm and food labour of those who manage it is structured into social expectations of women’s labour.


Key words: Europe, Poland, food security, food safety, non-governmental organization, women’s activism, women’s strategies

This paper provides a brief overview of the international debate over food security, which has specific implications in central and eastern Europe. The author contends that local- and household-based interpretations are identifying a critical and missing component of food security, namely food safety. The Gliwice Chapter of the Polish Ecological Club is highlighted as an NGO that has effectively redefined food security to include and contend with environmental pollution that impacts food safety. The “Tested and Organic Food for Residents of Densely Industrialized Urban Areas” Program has evolved to emphasize a precautionary approach of risk prevention. The NGO has a predominance of women members, who are networking regionally to confront the issues of urban food contamination.

Key words: Europe, Poland, women’s activism, food contamination, non-governmental organization

This chapter details the activism of women in reaction to industrial pollution and food contamination in Upper Silesia, Poland. The effectiveness and ongoing activity of the “Tested Food for Silesia” program has contradicted the public message that women, particularly mid-career and older women, are the least powerful in society. The group has created an environmental management model of immediate relevance. Future challenges include the loss of urban farm land to commercial and industrial use due to increased public education as to contamination risks.

Articles by the same author:


Bellows, Anne C.  “Urban food security in Poland”.  Ecology and Farming, 16 (September-December 1997) 24-5.


Key words: Africa, Zimbabwe, household survey, women’s roles, health, nutrition, economic impact, cropping pattern, vegetable production, intervention strategy

The understanding of the actual value and potential of urban agriculture in feeding urban populations is an important first step in defining the future of urban agriculture in Zimbabwe.  This report outlines the findings of a household monitoring exercise conducted in Gweru during the period September 1996 and April 1997.  The study focused on the economic, health and nutrition impacts of urban agriculture, and identified crop types of on and off plot urban cultivation and activities during the cropping season.  The study showed that women are the main participants in all the activities in urban cropping and vegetable production.  Apart from women being economically disadvantaged, this could also be due to the African cultural views of women as the principal actors in the provision and preparation of household food.  The
study concludes that urban agriculture benefits a significant portion of the households in Gweru. Urban planners and policy makers should incorporate gender considerations in the layout design and planning of urban infrastructural services. To this end, more gender focused research and workshops on gender sensitization ought to be carried out.

**Articles by the same authors:**


   Key words: household strategies, women’s roles, gender roles, subsistence production, income generation, gender assumptions

   International comparisons of research on the agronomic, social, and policy aspects of urban agriculture share the conclusion that urban food production is an important component of household survival strategies. Most urban farmers are poorly educated women with families who possess only a few of the skills that are valued in the marketplace. Such women are among those most likely to invest their labour, but few other inputs, in urban agricultural production. These urban farmers creatively gain access to rights-of-way and use vacant land which they usually do not own to grow staple foods and raise small livestock near their dwellings. Hostile government policies and access to water are key constraints to their productive capacity. These conditions help explain why successful gardens are often limited to the rainy season. Yet, urban agriculture, which flourishes during difficult economic times, provides between ten and thirty percent of the household budget. The paper concludes that urban farmers, like their rural counterparts, engage in work that is gender stereotyped. Since subsistence production is perceived to be part of women’s responsibility for feeding the family, it is hardly surprising that women are the dominant participants in this art of urban survival.


   Key words: Africa, Kenya, informal settlement, gender relations, gender roles, decision making, labour, women’s roles, power relations

   This study examines urban food producers and their households in Kibera, a large informal settlement of Nairobi. One of the main features of this study is the addition of a qualitative dimension to urban agriculture research in east Africa. Empirical evidence is provided on gender relations, labour relations, and the multiple uses of produce at the individual, household and community level. The traditional division of agricultural labour was noted during fieldwork: men preparing the soil for planting, and women responsible for harvesting food for daily needs. Women decide how much produce to sell and what food to buy, in consultation with the spouse in order to provide a means of preserving marital harmony. Women’s decision-making power may be undermined by factors such as size of plot, need for cash, and personal health. Women are also less likely than men to have knowledge on inputs, such as pesticides or use of sewage water, due to their limited exposure to commercially-oriented agriculture. The study also reveals that numerous labour issues are directly related to the prevailing gender ideology in Kenya. Female urban producers must carry out most of the care and maintenance of the household, regardless of the time they devote to food production or other livelihood activities. Thus, women tend to stay in the field
longer than men, and are expected to fetch water and prepare meals upon returning to the house. In other cases, women’s ability to control their own agricultural labour time is limited by responsibilities to others.


Key words: Africa, East Africa, women’s roles, intervention strategy

The purpose of this paper is to review what is currently known about urban agriculture and urban farmers, examine the significance of urban agriculture for women, highlight some of the benefits of and impediments to the expansion of urban agriculture, and suggest an analytical framework for future research and projects. Examples used are mainly from an east African context. The issue of women and urban agriculture is explored in relation to women’s practical needs, household status, and triple role. The author makes recommendations on how researchers and project planners should approach gender relations in urban agriculture. These include research into gender-based differences, decision-making, access and control, policy approaches.

Articles by the same author:


Key words: Africa, Zambia, household survey, food security, management strategy, women’s roles, gender differences, intervention strategy, extension services

The relationship between urban food production, food security and urban environments has been largely neglected. This paper focuses on results from a household garden survey conducted during 1992 and 1993. The main objective of the survey was to clarify the role of household gardens for household food security in Zambia and to identify differences and problems in management strategies and their effects on production in different areas. The results reveal that the main actors in urban agriculture are often women. In all compounds studied in Lusaka, women were to a greater extent involved in cropping and gardening than men. Gender analysis is used to reveal differences between men’s and women’s urban agriculture techniques with respect to alternative methods of plant production, crop species, and use of fertilizer, manure and compost. The paper argues that gender specific differences in agricultural activities need to be paid more attention by extension services in urban and peri-urban areas.

Key words: Africa, Zambia, garden cultivation, cropping pattern, seasonality, women’s roles

In Lusaka, Zambia as in many other tropical urban centres, gardening and cropping receive very little support from local authorities. Indeed, city councils often prohibit these activities. Production of staple foods prevails in the wet season, and vegetable production in the dry. Both activities largely depend on access to resources like water and land. Within the high- and medium-density squatter quarters, vulnerability in terms of food security differs. In the Zambian case, it was found that dry-season cultivation is not practised by the most vulnerable households but rather by those which have access to essential resources for this activity. In Lusaka, garden size decreases with increasing population density. The walking distance to sources of water is much further in the high-density areas, making microfarming more difficult there. Access to both land and water is lowest in the high-density, low-income compounds in Lusaka. Microfarming obviously contributes to household food security in the city both directly by providing food and indirectly by generating income. These are significant differences between the role of women and men in urban household food security. Women are the major actors in the urban microfarming but face many obstacles with respect to income generation and access to resources and markets. There is urgent need for appropriate support of urban agriculture in the future. The paper tries to give some ideas.


Key words: Africa, Zambia, household survey, garden cultivation, women’s roles, food security, household analysis, intervention strategy

This paper focuses on urban agriculture in Lusaka and is based on a household garden survey conducted during 1992 and 1993. The main objective of this survey was to explore the role of household gardens in the context of household food security in Zambia. The findings reveal that women are more involved in agriculture and gardening in all compounds of Lusaka than men. In many ways women play an important role in the food supply of households: through their productive labour, their decisions on production, consumption and division of food, and through their income. A household gardening model was developed to enable a better understanding of urban gardening activities in the social and environmental context. The model can assist in highlighting and clarifying some of the factors influencing urban agriculture. The household itself is based in the centre of the model, with various internal and external factors determining the vulnerability of the household. The study reveals that gardening contributes to food security directly by providing food and indirectly by creating income respectively saving expenditures in the urban environment. Strengthening the role of women is listed as a potential recommendation for policy-makers for potential development of the urban agriculture sector to address household food insecurity.

Key words: Africa, Zambia, garden cultivation, gender differences, peri urban, rural, intervention strategy

This study describes home garden activities and the main problems experienced in maintaining home gardens. Research is conducted in relation to household food security issues, as well as ecological function of home gardens within the land use system. It compares gardening in urban, peri-urban and rural areas of Zambia. One of the main objectives of this study is to determine differences between male and female gardeners. Findings reveal that more male gardeners are found in peri-urban and rural areas than in urban areas and access to land in these areas more difficult for women than men. In urban areas, women have longer walking distances to water sources due to the fact that people often cannot chose the garden site. Female household labour is most important in urban home gardens, while male labour is key in rural areas and peri-urban areas have a mix of female-male labour. Strengthening the role of women is noted as a recommendation for policy makers in the future.


Key words: Africa, Ethiopia, migration pattern, migrant households, cooperative organization, household strategies, gender roles, women heads-of-households, intervention strategy

This chapter focuses attention on a relatively neglected, but potentially significant area of concern for urban development planning and management in Ethiopia, that of urban agriculture in Addis Ababa. It presents evidence on patterns of migration and on the role of UA in the survival process of migrant households; analyses the production and management organization of UA cooperatives and their implications for understanding UA as an activity and a distinctive process in household survival; examines the income, employment and consumption effects of UA on cooperatives and individual households; assesses the structure and division of labour within low-income urban farmers households; and examines the effect of UA on urban poverty in general. The research is based on a survey of a sample of members of one of the vegetable producers’ cooperatives, the Mekanissa, Saris and Furi Producers’ Cooperative in Ethiopia. The chapter notes distinct female/male roles within the cooperative, and highlights the double burden of reproductive and productive work of women, especially women household-heads. It is suggested that UA policies must look into the benefits to households, especially to women who lack alternative economic opportunities. To this end, women must be involved in management and decision-making aspects of production and distribution processes.


Key words: Africa, Kenya, informal settlement, elderly women, nutrition, vegetable production, livestock, income generation, subsistence production, environmental degradation

The aim of the study is to determine the social-cultural, health-related factors and economic characteristics of elderly Nairobi women that may impact their nutritional status. The study is based on data collected from two hundred and one elderly women from slums of Kawangware and Kibagare, and the low income areas of Dagoreti and Waitaka in Nairobi. The findings reveal that women in low income
areas use their land for growing food crops such as beans, kale, cabbage, and bananas. Some of these women also had a dairy cow that produced milk for their own consumption or for sale to neighbours. The marketing of fruit and vegetables was also cited by women as a income-generating activity in both slum and low income areas. Elderly women in the slum areas turned to growing vegetables on the edges of roads and any other open spaces due to economic hardships. This activity created further environmental degradation due to the uprooting of natural vegetation and potential soil erosion in these spaces. The author concludes that there is an urgent need to provide basic means of raising incomes and standards of living for families headed by elderly women. In turn, better living conditions will improve the environmental conditions of slums and low income areas.


Key words: Asia, Thailand, subsistence production, women’s labour, community organization

This article focuses on the production-consumption-pattern, usually referred to as a subsistence economy. Activities are carried out by unpaid labour, mostly female, to produce goods and services for own consumption of the immediate family or household. Activities include the growing of food and its processing for own use, education, construction of housing, and health care, and take place largely outside the market economy. The article argues that subsistence production can be distinguished on two levels. First, everyday reproduction of labour power within the household; and second, subsistence production organized on a more extensive scale via cooperation of several households or groups. The authors contend that individuals within households employ strategies, for example specialization, to use the available labour power in the most efficient way. Three case studies illustrate that subsistence production is closely related to the availability and allocation of labour power. The examples detail the division of household labour by gender in the subsistence economy.


Key words: Latin America, Paraguay, development project, women heads-of-households, income generation, credit, livestock, poultry, vegetable production, cooperative organization, municipal government

This article details a project in the medium-sized town of Concepción, Paraguay, that seeks to enable poor families to improve their diet and increase their income by promoting small livestock and vegetable production. The project focuses on the resettlement of flood victims, and the Primavera settlement now houses 400 poor families, mostly headed by women. Numerous “productive” projects were developed by the women themselves. Various activities were carried out in the home so as to avoid problems of child minding and conflict with men who often forbid them to work outside the home. One such activity, the raising of laying hens, proved problematic due to the high initial outlay and the degree of attention the chickens required. The project failed in economic terms and loans have not been paid back, but most of the poultry and egg production goes to feed the household. A collective vegetable garden, the manufacturing of preserves and soap, and beekeeping have proved more successful. These activities did not require the women to take out loans, and materials were donated and intensive assistance and technical advice were supplied. Work with these self-help groups led to the establishment of a secretariat for social and community development within the municipal administration in 1993, which now runs a number of projects itself. Two such projects are detailed in the remainder of the article.

22. Freeman, Donald B. “Survival strategies or business training ground? The significance of urban agriculture for the advancement of women in African cities”. African Studies
This paper suggests that, contrary to findings in other research, urban agriculture is not a stop-gap activity, nor a means to become wealthy. The motivations of the urban cultivators appear not to be influenced by what planners, researchers or urban administrators feel ought to be the correct attitude toward urban farming. This paper analyzes interview data collected in Nairobi, Kenya in 1987 as part of a survey of active women cultivators. The paper first looks at the stated motives of women cultivators, and is then supplemented by information gathered through detailed case studies of three individual women involved in urban farming. The most common motivation of women cultivators was the need to avert hunger, but also important was the availability of home-grown food so as to free-up scarce cash earned by family members. The paper concludes that female cultivators face major impediments to meaningful advancement in Nairobi. Women are, in turn, dependent on the low-wage, formal manufacturing and service sectors for a market for their produce, and their activities are necessarily seasonal in the absence of the means to irrigate crops. The importance of this group as role models for other Third World women, the paper concludes, greatly outweighs their actual numbers.


This study focuses on the spatial distribution, practices, motives and problems of urban cultivators in a large Third World city. The objective is to shed light on urban agriculture, an important but little understood component of the urban informal sector in Nairobi. The author addresses and emphasizes the significance of women in urban agriculture. A chapter entitled “The role of women cultivators” details the evolution of women’s roles in agriculture from rural areas to the urban context. Gender differences in urban agriculture practices are highlighted through statistical information on educational status, migration patterns, geographical distribution of farming practices, plot sizes, age structure, occupational and economic status, theft of crops, waste disposal, and marketing and sale of crops. Although the empirical evidence and conceptualization of urban agriculture is largely generic in other sections of the text, the author intermittently notes the importance of the correlation between women and UA. To this end, the link between women migrants and increased urban agriculture practitioners is identified. The potential of UA as a training ground for women entrepreneurs is also noted.


This article examines the prospects for the expansion of export-oriented contract horticulture in southwestern Burkina Faso, specifically in the area surrounding the city of Bobo-Dioulasso. It sets out the main arguments for why any discussion of West African contract farming must take account of the gender roles and moral codes which have historically informed relations between peasants and different members of the urban merchant community. The day-to-day provisioning and commercialization depends on the services of itinerant and local traders, many of whom are, especially in fresh produce commerce, are women. The crucial role of women traders, contrasted with that of male politicians and entrepreneurs, has created a distinctive culture of contract farming. The case study presented demonstrates how women traders have made the most of limited career opportunities by placing the flexibility and durability of their
commercial relations above season-to-season profits. In the interest of building trades they could pass to their daughters, women wholesalers set standards of trust and commitment that contractors find hard to match. The presence of a well-established, gender-based regional trade network poses a potential obstacles to profitable contract horticulture schemes because this network is essential to the economic security and occupational identify of both women traders and village gardeners in the Bobo-Dioulasso "garden belt".


Key words: Africa, Burkina Faso, rural-urban linkages, entrepreneurship, women traders, gender bias, historical linkages

This paper recounts the career histories and current ventures of numerous ‘agro-entrepreneurs’ operating in southwestern Burkina Faso, specifically in the area surrounding the city of Bobo-Dioulasso. It shows that while they are finding both new opportunities and perils in high-value export horticulture, ‘agro-entrepreneurs’ are also running up against obstacles to agricultural accumulation familiar to past generations. The author contends that the ongoing economic reforms will not dramatically transform the historical-structural conditions of African entrepreneurship. In relation to women traders, economic reforms have not created a market that is more free of prejudices and old-boyism than commerce under socialism or colonialism. The norms, practices, and sites of economic activity are structured by numerous factors including by relations of gender, class, and so forth, in historically specific ways.


Key words: Africa, Burkina Faso, historical perspective, market gardening, vegetable production, labour organization, labour relations, gender relations, entrepreneurship

This dissertation traces the twentieth century social and environmental history of the market-gardening sector around Bobo-Dioulasso, Burkina Faso's second largest city. Intensive vegetable cultivation has become one of the most important sectors in the regional economy. The narrative focuses on the changing economic and social meanings of work - the many tasks and processes required to get produce from farm to market to cooking pot - in order to examine the on-the-ground effects of a set of interrelated historical forces. Gender- and age-based divisions of labour have resulted in relation to both production and marketing. Hardship and uncertainty has aggravated tensions within the households and peri-urban village communities involved in market-gardening. It has also affected relations between and among producers, wholesalers and retailers. In the wake of recent trade liberalization, gardeners are adopting more “entrepreneurial” strategies in order to secure access to external markets and aid. These livelihood strategies both reflect and inform the changing meaning of market-gardening work.

Key words: Asia, waste management, waste recovery, waste recycling, women’s roles, adolescents, community organization, urban poor

This review sets out issues suggested by a socially-responsive view of solid waste management. Such a view gives central importance to waste recovery and recycling, not merely as technical, resource-generating operations, but as the source of livelihood for many thousands of urban dwellers. The paper highlights the specific relationships between women’s work and wastes. Illustrations of informal practices are provided in the context of Asian cities, including examples from China, India, Indonesia, Nepal, Pakistan, the Philippines, and Thailand.


Key words: Asia, waste management, waste recovery, waste recycling, informal sector, women’s roles, environment, intervention strategy

The work of urban women with waste materials is relevant for cities’ economies and services in three principal areas: the use of wastes to meet household needs, informal work in waste recovery and recycling, and women’s roles in municipal solid waste services. The author explores these areas and illustrates the contribution of women to urban waste management in an Asian context. There is some basis for assuming that women acquire distinct insights into attitudes to wastes and waste behaviours that until now have not been used for environmental improvement. The author identifies a number of ideas for research, stemming from the issue of women and wastes, that can help community action and official policies for environmental improvement.


Key words: Europe, United Kingdom, land access, garden cultivation, women’s organization

This report presents analysis and a wide variety of case studies which illustrate that urban agriculture can, in a practical way, yield a range of benefits. Women are briefly highlighted in relation to combatting discrimination. In the United Kingdom, urban agriculture allotment has traditionally been a male domain. Women tend to be more involved in group food growing projects, rather than traditional allotment gardening, and are often responsible for initiating the projects. Five case studies are identified as those initiated by women in the United Kingdom. The author contends that by giving women experience at the beginning of the food chain, food growing projects can help broaden women’s awareness of their actual and potential abilities.

Key words: Africa, Mozambique, peri urban, cooperative organization, women’s organization

The research is on the contribution of women’s agricultural work to the reproduction of urban families in Maputo, Mozambique. The subsistence *machambas* (small fields) in the suburban districts (of which two are considered) of Maputo has always been an essential support to the survival of the family, where men’s salaries were not adequate. Cooperatives have attracted such women producers, belonging to the less privileged sectors of the population because they guaranteed land and some means and factors of production.


Key words: Africa, Mozambique, peri urban, land access, cooperative organization, women's organization

This article focuses on the transformation of the suburban farming areas around the capital of Mozambique. Land ownership and control issues have resulted in conflict between diverse parties and interests. New fears of renewed expropriation have increased among women in the suburban agricultural zones who still need access to land for growing food for family consumption. Agricultural cooperatives are in large part formed by women who, by age and social stratum, have no alternative means of support. The strong participation of women in cooperative development has significantly contributed to transforming their social status. The author contends that major technical and educational support is needed for cooperative members.


Key words: Africa, Burkina Faso, gender differences, gender bias, household resources, economic activity, ecological zones

This article uses an outlay equivalent approach, disaggregated by urban and rural, by agroecological zone, and by income stratum, to more accurately and rigorously detect whether gender inequality exists in household resource allocation in Burkina Faso. It considers whether the extent of gender bias (if any) differs by economic activity across different ecological zones, or whether the extent and pattern of gender bias (if any) within zones differs by the level of economic activity (income). Urban data used to estimate the models come from a sample of 125 randomly-selected households from the city of Ouagadougou during 1984/85. The analysis finds little discrimination by agroecological zone or income group in Burkina Faso. It was not possible to reject the null hypotheses that discrimination does not vary by the level of agricultural and non-agricultural economic opportunities for women or by the level of household wealth.

Key words: Africa, Ethiopia, peri urban, resource use, fuelwood, urban forestry, women’s roles, women heads-of-households, women’s strategies, development project, resource depletion, resource management, environment

This report presents the findings of an action-research project to assist women fuelwood carriers in Addis Ababa, Ethiopia. Attitude studies among fuelwood carriers showed that they are conscious of the present over-use of the resource as well as of the need for forest conservation. Approximately 10,000 women and children backload mostly branch-wood and leaves into the city to satisfy its energy needs. Socioeconomic-economic surveys revealed that migration is a major reservoir of new entrants into the occupation. Sixty percent of carriers are heads of their households. Education levels are low, and housing, water supply, access to health services and child care facilities are all extremely poor. Four self-help groups were set up in neighbourhoods with a concentration of fuelwood carriers. The groups went through a process of communication training, problem analysis and identification following a methodology adapted by the project from various pedagogical concepts. They then proceeded to proposing possible interventions that would solve their problems and to examining the feasibility of these interventions. Interventions proposed by the women all aimed at finding an alternative occupation, including vegetable farming and beekeeping with ornamental plant production. Land acquisition proved to be a major obstacle because of long administrative procedures, and interim activities had to be initiated in the meantime. It also became clear that the women’s initiatives will have to be complemented by a lasting solution on the forestry side. Unless the carriers are integrated into forest management and harvesting in an orderly and legal fashion, intolerable working conditions and forest degradation will continue because new carriers will take the place of those transferred to other jobs.

Articles by the same author:


Key words: Africa, Ghana, Uganda, Zimbabwe, gender issues, research agenda, non-governmental organization, gender analysis

This study examines the marginalization of gender issues within urban agriculture research agendas. Data was collected from field visits to the cities of Accra, Kampala and Harare. It provides an overview and analysis of the nature and extent of NGO policies and strategies regarding the integration of gender into urban agriculture research. It is found that many NGOs are working with ‘women in development’ approaches. A proper understanding and scope of ‘gender analysis’ within these organizations is needed. Participatory learning partnerships should be developed amongst relevant groups, organizations and institutions to share gender sensitive research findings and create provisions for effective gender-focused policy interventions.

Key words: Europe, England, Bangladeshi community, community organization, women’s organization, vegetable production

This paper details a case study of a recent (1996) urban agriculture program developed by the Bangladeshi community in Birmingham, England with support from the Bangladesh Women’s Association (BWA). The author discusses gender roles in the initial planning stages of the program, as well as during the implementation of the vegetable gardening, waste collection and recycling projects. The scale and impact of the project in its early stages is discussed through issues of nutrition and health, environmental awareness, and integration of urban agriculture. Women have benefited through increased education and employment opportunities. The author contends that a fundamental key to success of the project has been the cooperation between professional and non-professional men and women.


Key words: Africa, Cameroon, Tanzania, women’s role, rural-urban linkages, food supply

This paper argues that increased attention to the problems of women farmers in Africa can help solve both urban and rural food supply problems. It builds its case on a close examination of the extensive farming system of the Beti peoples of southern Cameroon and the intensive farming practices of the Haya of northwestern Tanzania. Research shows that women significantly increased food production when they had good access to large urban markets. Investments in rural roads and marketing facilities, as well as in agronomic research, would tap a considerable reservoir of food supply. Increased food sales to urban markets will allow women farmers to make productivity enhancing investments in their food production and processing activities. Women as development planners are much more likely than men to be able to devise policies which can loosen constraints to urban food supply.


Key words: Africa, Zimbabwe, economic restructuring, market women, women traders, horticultural production, entrepreneurship, income generation

This article discusses women fresh produce vendors in Harare within a larger context of “responsible development” and structural adjustment policies in Zimbabwe. Analysis includes brief reference to linkages between market women and urban horticultural crop production. For example, in urban areas, women’s task of food provision is more difficult because housing plots are generally not large enough to grow gardens. Many women opt to become fresh produce vendors for it allows them to provision their families. Vendors purchase produce from urban neighbourhoods where green vegetables are grown in gardens on larger compounds.

Key words: Africa, Zimbabwe, market women, women traders, entrepreneurship, historical linkages, rural-urban linkages, horticultural production, food self-sufficiency, informal sector

To overcome economic vulnerability in the city and to ensure family provisioning, Zimbabwean women fresh produce vendors take risks to conduct trading enterprises that constitute the end point in a production-marketing chain of perishable commodities. This book explores reasons as to why women establish and maintain such enterprises. The analysis tells a story of their commitment to self-sufficiency. The author details the historical aspects of agricultural and urban development, and the resulting role of women as fresh produce vendors; explores the role of women in rural-urban food distribution systems; and discusses the far-reaching implications and policy options of the research.

**Articles by the same author:**


Key words: malnutrition, urbanization, women’s roles, food security, urban poor, intervention strategy

This paper explores urban malnutrition in terms of urbanization and related processes. The authors contend that it is necessary to understand the magnitude of and trends in urbanization, as well as the characteristics of settlements themselves, and the (in)direct effects of hunger on the persons who inhabit them. They describe the effects of urbanization on hunger, along with the extent of malnutrition in cities, with particular references to women’s experiences and roles in food preparation and processing. Urban agriculture is noted as one of (at least) five measures to combatting the growing menace of urban hunger. Small-scale home-level livestock rearing (eg. poultry, rabbits) is highlighted as a potential way to significantly add to women’s income and improve nutrition and health. Measures, such as urban agriculture, will be necessary to provide for those who are bypassed by general economic development and reside in the slums and shanty towns of the developing world.


Key words: household economy, women’s roles, garden cultivation, socioeconomic differentiation, subsistence production, food supply, historical perspective

In this chapter, the author considers whether there is a larger, broader history of women and gardens which underlies the community garden movement. What meaning - personal, social, and political - have gardens held for women of different classes and ethnicities? The practice of gardening has been stratified by wealth and by gender. Millions of subsistence, kitchen, and medicinal gardens planted and tended by women have been central to household economy, village health and local biodiversity. The garden has been a source of natural beauty for the urban and rural poor. Yet the value of this work, is generally not counted in the economy because it is unpaid and not market-based, nor is it recorded in environmental history because it is considered insignificant work of many “ordinary” women. Women’s contribution through gardening to the world’s food supply is chronically underestimated. The author draws a parallel between inner cities in the United States with the Third World: the urban community garden has the
potential to feed households and generate local cottage industry, restore a measure of community life, and recycle organic wastes.


Key words: Africa, Cameroon, women’s strategies, rural-urban linkages, food supply, fuelwood, women’s employment, child welfare, income generation

This paper examines a study of women, work and child welfare in Cameroon. Local women have devised strategies that enable them to care for their families during economic crisis. One such strategy involves supplying the urban markets with essential food and fuel. The author details the processes, activities and issues related to women’s involvement in subsistence and income-generating food production for household consumption and for sale in urban areas.

42. Lado, C. “Informal urban agriculture in Nairobi: problem or resource in development and land use planning?” Land Use Policy. 7:3 (1990) 257-266.

Key words: Africa, Kenya, food self-sufficiency, nutrition, urban poor, women heads-of-households, women migrants, land use planning

This study examines urban agriculture in Nairobi, Kenya. It focuses on urban farmers, their spatial distribution and characteristics, cultivation practices, crop types, consumption patterns and crop produce disposal. It is concluded that urban agriculture contributes to food self-sufficiency and helps raise the nutritional standards of poor urban residents who are otherwise unemployed or holding down low-paying occupations, particularly female-headed households. As the number of poor increase and particularly as the ranks of women migrants to the city expand, so will urban agriculture intensify. Therefore, there is a need to formulate a comprehensive land use plan which incorporates food production and socioeconomic structures for urban centres in Kenya.


Key words: Africa, Kenya, urban theory, urban policy, urban development, women’s roles, subsistence production, urban poor, food security

This article analyzes the characteristics of urban agriculture in Kenya within a wider conceptual and socioeconomic context and is based on a survey by the Mazingira Institute (Lee-Smith et al., 1987). This article emphasizes the significance of incorporating a food component, namely crops and livestock, into urban theory, and raises questions of policy for sustainable urban development. The authors claim that the situation in urban areas with respect to urban farming must be understood as part of a wider food crisis, exacerbated by the fact that women’s work and subsistence production are largely ignored, and the situation therefore remains misunderstood. The article notes women’s roles and participation in urban agriculture. Extension services need to be made more available in urban areas, and specifically, they need to be directed to poor urban women. The article concludes by stating that the fact that urban farmers are mainly, but not exclusively, women producing for their own families’ consumption, is no
reason to discount the conceptual significance of these activities or the value of their primary economic production.


Key words: Africa, Mozambique, peri urban, women’s roles, market women, land access

This paper stems from research conducted in the district of Mahlazine on the periphery of Maputo, Mozambique. The research focuses on suburban agricultural activity, largely done by women. It reveals that eighty percent of the families had machambas (small fields) close enough for daily work. A further ten percent of families had machambas at a distance of twelve to fifteen kilometres. Some of the women had market stalls where they sold a portion of their produce. Productivity of the land varied from area to area, so that not all families produced a surplus.


Key words: Africa, Mozambique, peri urban, migrants, rural-urban linkages, household strategies, women’s roles

This paper explores the economic situation and the social networks of migrant families in Mahlazine District, a peripheral area of Maputo, Mozambique. Reasons for migration are generally based on economic principles and are part of a collective strategy. The author contends that migrants continue to rely on rural survival skills. These skills involve more than simple agricultural activity; rural-based values that focus on family, ethnicity and religion are predominant among new urban residents. Residents in the so-called “cement city” in Maputo generally do not have gardens. However, in the city’s suburban neighbourhoods, women continue to be involved almost exclusively in agricultural labour.


Key words: Africa, Guinea-Bissau, peri urban, food supply, food security, informal sector, women’s roles, household strategies, urban poor, informal settlement

This paper addresses the role of urban food supply for urban food security and attempts to uncover the diversity and complexity of the urban food system, through an integrated study of food production, distribution and consumption of two different foodstuffs. It focuses on informal food supply in a peripheral district of Bissau, Guinea-Bissau. The study reveals that different foodstuffs contribute differently for urban food security, are integrated in the urban food system in different ways, and have distinct production, marketing and consumption structures. The highly diversified nature of urban food supply is illustrated by the variety of scales of food production and marketing activities. Poor households integrate cash and subsistence elements in their food consumption, as well as the formal and informal urban food sectors in order to improve their access to food. But within the informal food sector, small-scale retailers and low status markets seem to play a crucial role in making food available to the poor at prices they can afford. The investigation takes the form of a case-study through a qualitative approach that has potential for revealing the experience of food security and the coping strategies of the urban poor in an unplanned peripheral settlement. Analysis of the distribution of different foodstuffs suggests the complexity of the social conditions underlying people’s involvement in the urban food system - this discussion briefly highlights women’s experiences in informal food trade.

Key words: Africa, Lesotho, resource use, wild vegetables, nutrition, income generation, gender issues, cultural factors, urbanization, women’s roles, social networks, rural-urban linkages

Although many people in Lesotho move to towns in search of better job opportunities, they miss out on access to natural wild food resources. It is argued in this paper that such resources can be adapted to the urban environment and wild vegetables could contribute to nutrition and cash income of urban dwellers. Gathering, preparing and eating are related to gender and culture. Earlier studies have shown that collecting and preparing wild vegetables is a strategy for rural women to provide a balanced diet for their families. Urbanization in Lesotho has affected women’s access to natural resources like edible wild plants. Settlements now occupy former agricultural land and wild foods become scarce in peri urban areas due to over harvesting. Urban women have to spend much more time to find enough wild plants for a meal. The study reveals that only a few people collect wild plants, and children are no longer taught about edible plants due, in part, to schools highlighting westernized curriculums which do not foster the value of indigenous plants. For many people in towns, wild foods have low status and they would rather buy cultivated vegetables from the market. Towns have created markets but only rarely are wild vegetables sold. Women from the countryside sell the wild vegetables through informal networks in town. A promotion strategy for wild vegetable focusing on knowledge, attitude, value and nutrition is suggested. Outward rather than inward growth of urban areas is also recommended by the authors. It is argued that gardens within urban housing sites in Lesotho are agriculturally more productive than fields in rural areas, and agricultural production does not decrease when fields are converted into housing sites with gardens in the present urban expansion pattern.


Key words: Africa, Mozambique, peri urban, cooperative organization, women’s organization, land access, privatization

This article briefly highlights the cooperatives in the Green Zones of Maputo as an example of popular efforts by people to survive and organize in Mozambique. Ninety-five percent of the 11,500 cooperative members are women. Many of these women have been able to create a life in the ‘public’ sphere, have gained access to all of the vegetables, grains and fruit that the cooperatives produce, and have had training in various livelihood skills. The Green Zone Cooperatives now find their land and markets under attack due to privatization. Urban businessmen or bureaucrats are claiming title to family land, and private producers are strong competitors to cooperatives who were once the only vegetable producers for Maputo. Cooperatives are seeking other markets and funding through NGOs for trucks that can keep them competitive.

Key words: Africa, South Africa, cooperative organization, women’s organization, elderly women, land access, subsistence production, income generation

This short article describes the urban agriculture activities of the elderly and unemployed women of Mamelodi, South Africa. The women were inspired by the Mamelodi Street Committees that sprung up between 1985 and 1987. These committees had a profound impact on the way of life in the township, enabling residents to take greater control of their lives. The women organized themselves into working groups of four to five, and took over most of the unused land scattered throughout the township, as well as along the riverside and mountainside. Rain-irrigated food crops provide food for their households and are also sold for much-needed cash. The women face an uncertain future due to land and property development issues.


Key words: Africa, Ghana, peri urban, land access, property rights, women's access, women's rights, urbanization, environmental degradation, women’s roles, intervention strategy

This paper reviews the literature on peri-urban land use, property rights change, and livelihoods, briefly highlighting findings on women’s experiences with such issues. The paper then compares four cases within the peri-urban periphery of Greater Accra, Ghana, to assess the impact of rapid urban sprawl on the area immediately surrounding the city. Cases examined include the loss of land to housing, the protection of agricultural land from urban sprawl, environmental degradation as a result of urbanization, and the commercialization of peri-urban agricultural production as a result of changing market demand. Findings show that women have fewer alternative livelihood options when faced with the loss of land for farming due to cultural factors or distances that must be travelled to find new farming land or new markets for trading. The paper ends with recommendations for policy and programmatic interventions.


Key words: Africa, Uganda, household relations, gender relations, household analysis, land access, food security, nutrition, women’s roles, women heads-of-households, urban policy, intervention strategy

The author contends that little is understood about the forces behind urban farming or its impact at the household level. Intra-household dynamics and gender relations, as well as declining wages and economic informalization, are all important to an understanding of urban farming. The paper presents an overview of the household analysis of urban farming, as based on research carried out in Kampala, Uganda, between November 1992 and October 1993. This includes a discussion of intra household dynamics, access to land, and a comparison of food security and nutritional status in farming and non-farming households. Underlying the evidence gathered is the fact that urban farming is almost completely under the control of women, who bear primary responsibility for provision of food. Discussion also centres on the implications of urban farming, and possible policy alternatives. The author suggests that programs promoting urban farming should give priority to low-income, female-headed households.
due to equity reasons. Such programs could be established through women’s organizations, such as informal savings and credit groups, and should be closely monitored, both in terms of the direct effect on women’s income, and in terms of food security and child nutritional status.


Labour in urban farming is primarily that of women. In spite of this observation, only a few studies have analyzed the practice specifically along gender lines. This paper examines semi-subsistence urban farming and the manner in which the practice has been incorporated into the economic strategies of urban households and individuals. The author argues that farming in the cities is the deliberate effort of urban women to provide for themselves and their households. It also provides security of a source of food that is not dependent on cash incomes or fluctuating markets. Gender is used to analyze patterns of engagement in urban farming, the use of food, division of labour, reasons for farming, and division of household responsibilities. Empirical evidence from Kampala, Uganda highlights multiple motives for farming and the dynamics of the struggle over resources between men and women. One theme that emerges from this gender analysis is contemporary women facing economic circumstances which leave them responsible for household food provision without, in many cases, access to the means to adequately do so. Urban farming represents some means of economic self-reliance for many women in Kampala - the women often downplay the significance of this activity, by emphasizing its cultural rather than economic relevance, and keep unknown sources of income unknown to maintain control of household resources which may be claimed by men. The conclusions challenge the extent to which farming in the city can be characterized as a “household strategy”, and have important implications for programs that may attempt to promote urban farming. Programs should give female-headed households priority; work through established women’s organizations; and, closely monitor any such program intervention in terms of food security, nutritional status, and the indirect effect on women’s income.


The objective of this paper is to evaluate the various claims made about urban agriculture in Kampala, Uganda. This includes reviewing the limited literature on the importance of this activity in Kampala; attempting to assess direct evidence on nutritional status; examining the means of access to land; and understanding the logic of various households involved in urban food production. Gender is applied to examinations of land access and household logic. The paper contends that commercial producers may be either men or women, and male and female household members may collaborate in business ventures. In production for food security, it is common for senior women in the household to gain access to land through borrowing, renting, squatting, or purchasing of use rights. Urban agriculture contributes to household food security, and allows women to use cash income on items other than the purchase of food. Urban agriculture often becomes a survival strategy for low-income female-headed households, widows, and families suddenly abandoned by a primary wage earner.

Key words: Africa, Uganda, household strategies, food supply, urban employment, literature review, women’s roles

The rationale for this study is specifically to understand and provide insights into individual and household responses to the “crisis” of development that has characterized the 1980s. It is hoped that an examination of productive strategies, such as urban agriculture, will suggest partial solutions to the problems of urban food supply and urban employment. The purpose of this study was to learn about the practice of agricultural production within Kampala, Uganda, as well as to outline relevant policy issues and areas for further research. A literature review highlights those studies focusing on women as urban agriculture practitioners (Rakodi, 1988; Freeman, 1988; Lee-Smith et al., 1987). Over two-thirds of the respondents in the Kampala survey turned out to be women. The study revealed that the majority of those engaged in urban agriculture are women.

Articles by the same author:


Key words: Africa, South Africa, urban policy, household survey, peri urban, women heads-of-households, land access, crop security, women’s roles, urban poor

Urban agriculture is increasingly seen as a major means of supplementing incomes in the cities of South Africa. In light of that nation’s transition to a non-racial democracy, the particular task of the paper is to review the potential and policy implications of urban agriculture in the context of national initiatives for post-apartheid reconstruction. To reach these objectives, findings of household surveys are represented on the nature, methods and problems of production of groups of (peri)urban farmers. The study points to variations in household headship, with a high urban agriculture participation in those categories predominated by female-headed households. The study also identifies major problems facing urban agriculture practitioners, and highlights women’s difficulties with land access and crop security. The authors contend that the role of women is crucial to the sustenance of urban cultivation among low-income households. In a discussion of emerging policy implications, the authors argue that a strong ground remains for efforts to extend the prospects for (peri)urban cultivation in the South African context.

Articles by the same authors:

May, J. and Rogerson, C.M., “How green is your garden”. Indicator South Africa. 11:3 (1994) 89-96.

Key words: Africa, Kenya, food production, fuel production, subsistence production, income generation, household survey, women’s roles, women heads-of-households, urban policy, extension services

This study analyzes the patterns of food and fuel production and subsistence consumption by urban households, based on a stratified random sample of urban households in six representative towns in Kenya. Survey data collected from October 1984 to July 1985 indicates that the majority of urban farmers are women. Women heads-of-households are especially reliant on subsistence food production for the survival of themselves and their children. The study raises the issue of women farmers for consideration by policy and decision-makers at national and municipal level. Urban extension programs need to be specifically targeted to women farmers if they are to effectively reach the majority, with allotment programs ensuring fair proportional access to women, particularly poor, women-headed households.


Key words: Africa, Zimbabwe, women’s employment, adolescents, gender roles, socioeconomic differentiation, gender relations, land access, decision making, power relations, men’s roles, women’s roles, men’s strategies, women’s strategies

This book addresses the phenomenon of urban agriculture in Zimbabwe. While it acknowledges that the activity is a significant source of food and income for the urban poor, the book draws attention to the development conflicts raised by the activity. It attempts to place urban agriculture within the context of urban economy, the environment, institutional concerns, gender and urban poverty. Evidence presented confirms the role of urban agriculture for employment of women and children. A review of gender dimensions of informal urban cultivation highlights the needs, problems and experiences of women’s double burdens of production and reproduction. Men’s social and economic motivation for urban cultivation activities are also noted. Issues of ‘gate-keeping’, women landlordism, and decision-making are discussed in terms of gender dynamics. It is noted that women are not a homogenous group, thus there is a need to revise generalizations of poor women, and extend research issues to high income groups. The author contends that urban cultivation should only form one part of a strategy designed to improve the position of urban women for it does not tackle the problems of women’s access to education, skills, wage and self-employment. Based on ongoing research the book demonstrates that there is a potential for urban agriculture as part of the urban economy, but that the urban poor, including women-headed households, are not major beneficiaries of the activity.

58. Mbiba, Beacon. “Classification and description of urban agriculture in Harare”.


Key words: Africa, Zimbabwe, gender issues, urban policy, women’s roles

Since late 1991, the Department of Rural and Urban Planning at the University of Zimbabwe has been engaged in a study aimed at placing urban agriculture within the context of the urban economy, urban management, and urban development. The study also extends to gender and institutional concerns and linking urban agriculture to broader issues of housing supply and the fiscal base of local authorities. This paper examines who the urban cultivators are, the official policy on urban agriculture, and the cultivators’ views on this policy. It also explores whether urban agriculture is a temporary adjustment activity to conditions in the city by recent rural-urban migrants, or whether it is part of socioeconomic life and survival of early urban migrants or residents. The motives, practices and problems of the cultivators, and the identity of the participants and decision-makers on the activity at household level are also highlighted. The
paper classifies forms of urban agriculture by type of product (arable or non-arable), by spaces used (on-plot or off-plot) and by institutional settings (legal or illegal). Research confirms the dominance of women in agriculture. Most of the women cultivators are responsible for deciding how to use the produce of cultivation. This shows again that women contribute to economic sustenance of developing countries in ways not captured by national accounting techniques.


This paper attempts to offer the general reader a panoramic view of the nature and context of urban agriculture in Zimbabwe. It is observed that women clearly dominate this sector. In some areas, women also dominate ownership of plots. The author contends that urban agriculture may not be for the poorest of the poor. For example, women-headed households were found absent from the urban cultivators in Harare. The women cultivators interviewed all had homes, owned by the husbands who were in formal full-time employment, and were found to be better off than the poorest of the poor. Nevertheless, since the cultivators are mainly women, the poverty issue needs to be abstracted from a family to an individual level in terms of how much control women have on outputs from the activity. Women have control and decision making power regarding cultivation, however, the husband’s consent is still required due to his potential assistance with financing or dealing with local authorities. Regarding urban policies, women expressed no ambition to take up political posts and were satisfied with the current political set-up. The author notes that internal household dynamics need to be further explored as relating to women’s status in the home.

Articles by the same author:


This paper describes the structure of the waste recycling industry in Hochiminh City, Vietnam, to document women’s contributions to waste recycling, and to assess the impacts of women’s activities on women and their families. Findings show that the waste recycling industry makes important contributions to the urban environment and the economy. Women’s earnings from their participation in this industry are important to their household because it represents the main source of income for the majority of households. In order to address challenges of the waste recycling industry, policy-makers must recognize its significance, support waste recycling factories, and support itinerant buyers’ enterprises, as has proved
successful by the Self-Employed Women’s Association in India. Education, training, mechanization, and better cooperation can also contribute to improvements in the recycling industry, especially for women.


Key words: Africa, Zaire, garden cultivation, women’s roles, gender relations, power relations, income generation, women’s strategies, labour

This chapter focuses on women and the organization of garden production in Kinshasa, Zaire. Gender relations are viewed as power relations whereby garden production becomes a game of power relations between women producers and husbands. Women undertake garden production to acquire economic independence from their husbands, as well as to meet the financial needs of their families. Through various strategies and tactics, women manipulate the sexual division of labour, despite its constraints, for their own benefit. They gain advantage over their husbands for initiating the production. In order to claim total autonomy, women gardeners establish control over the management, marketing and revenue derived from production. They thus modify, both at the level of garden production and at all levels of power related to this production, the traditional image of women.


Key words: Africa, Tanzania, environmental degradation, women’s roles, extension services, extension agents, credit, livestock

This study is about urban agriculture, its practice in Dar es Salaam, Tanzania, and the issues raised by the damage it can frequently cause to the environment. The author provides gender disaggregated data on urban agriculture practitioners interviewed. It is noted that urban agriculture is primarily done by women, many of whom tend to be economically marginalized. The study raises a controversial gender issue, namely the effectiveness of female versus male extension agents. Qualitative data points to questions surrounding women extension workers’ willingness to do field visits in dirty environments, and ability to handle larger livestock such as cattle. The study also briefly notes government policies as related to women’s credit, and the perpetuation of support to urban practitioners, including women, in higher-income brackets.

Key words: Africa, Zimbabwe, women’s roles, urban planning, women’s employment, gender bias, land access, gender relations, power relations, socioeconomic differentiation, household strategies, income generation, subsistence production, urban policy

Though a widespread practice, urban agriculture is not planned for or supported by urban planners and managers as a legitimate form of urban land use in Harare, Zimbabwe. As women are the main participants in urban agriculture, their activities come into direct conflict with planning provisions for urban space. This study examines the role of women in urban agriculture and views and perceptions of the use of urban space for agricultural activities in Harare. The large presence of women cultivators is indicative of women’s reduced opportunities for formal employment in urban areas and the perceived notion of women having primary responsibility for providing family sustenance. While women were the predominant “owners” of the plots, the men in the fields were primarily cultivating land on behalf of their spouses or as hired hands. A significant proportion of female respondents were heads-of-households, and urban agriculture is practised by women of all socioeconomic-economic classes. Those women in professional occupations tended to hire contract workers for their plots. Data collected also supports the fact that larger households are more likely to be under pressure to supplement their food sources and incomes via urban agriculture as a survival strategy. Urban agriculture offers women the opportunity to enhance their economic power within the household, although not without negotiating with their spouses, and the ability to provide food for family consumption. The study identifies two immediate issues requiring the attention of policy makers. First, the potential increased competition for land, as reduced employment opportunities push more men to pursue urban agriculture activities, may pose a threat to women’s future access to land. Second, current urban planning concepts must be reviewed so that a clear policy on urban agriculture is formulated so that it will support women’s struggle for sustaining family livelihoods in the urban economy.

Articles by the same author:


Key words: women’s roles, gender roles, waste management, income generation, environment, gender bias, economic status, cultural factors, urban poor, social inequality, socioeconomic differentiation, intervention strategy

This paper focuses on the relative roles of women and men in urban waste management. The author introduces the concept of gender and development. This concept may assist NGOs to understand the social and gender implications of their work, and assist them in applying their ideas to waste issues in urban communities. As part of women’s roles in the household, waste handling is an important source of income, especially for poorer women, and is a focal point for urban environmental management. The author details various economic and cultural barriers which negatively affect women as compared to men. Several non-geographically specific examples illustrate the different needs and interests of women and men as raised through experiences with community meetings and consultation. Gendered definitions of “waste” and “resources” should be reflected during discussion of priorities regarding waste management. Other social inequalities work to reinforce the disadvantaged position of women and other groups. Recommendations are made for strategies to support the inclusion of both women and men in waste
management activities and to reduce social inequalities.


Key words: Africa, Kenya, household survey, urban poor, household strategies, food security, nutrition, gender analysis, women’s roles, subsistence production, women heads-of-households, extension services

This research, carried out in Nairobi between June and October 1994, examines the role of urban agriculture in household food security among low income urban households. The objectives of the study were to determine the different strategies deployed by households to feed themselves. Two hypotheses were advanced, namely (a) practising urban agriculture leads to more food security and better nutritional status in low income households, and (b) low income households involved in urban agriculture and obtaining technical assistance from an organization have even greater food and better nutritional status compared to the rest of the low income households. Gender analysis of the division of labour and household composition reveals that, in the large majority of farming households, women are responsible for urban farming and that most of the food is for subsistence rather than for sale. Also, more farming households compared to non-farming households are female-headed. The author recommends that urban extension programmes have to be specifically targeted to female farmers if they are to effectively reach the majority.


Key words: Middle East, gender differences, gender relations, cultural factors, sociospatial differentiation

This paper surveys the primary characteristics that set the context for urban agriculture and urban food systems in the Middle East. The authors briefly note that Islam has a number of gender-based socioeconomic-spatial implications for urban agriculture in the region as a whole. Gender helps shape the division of labour, determining who cultivates what where, and impacts the location of gardens, with those farms within the confines of an enclosed plot being favoured over shared spaces such as community gardens. The strictness of adherence to Islamic precepts, and thus gender-based implications for urban agriculture, varies across the region.


Key words: Africa, Ethiopia, peri urban, cooperative organization, women’s roles, livestock, dairy cattle, dairy production, dairy marketing, women heads-of-households

This paper examines the impacts of the establishment of the milk groups, by the Smaller Holder Dairy Development Project, on women’s role in dairy production and marketing. The focus is on the extent of sources of labour for cattle care, the amount of time spent processing and marketing dairy products and fluid milk, and the control of income received from dairy product and milk sales. The study documents the role of women in dairy production and marketing. Findings reveal that adult women provide important amounts of labour for feeding and milking of cattle, but are less involved in the marketing of fluid milk, which is often transported to the milk groups by children. The wife or female household-head provides the
majority of time for home processing and marketing of butter and ayib. The time commitments of adult women to such activities are substantial. Although reduction of marketing times would appear difficult, technologies to reduce butter processing time would seem to deserve attention. Analysis of the effects of milk groups on women’s role in dairying provides little evidence on large or systematic impacts on who provides labour for cattle care or on the time spent processing or marketing. Some evidence points to additional time requirements for daily marketing of fluid milk, the re-allocation of some milk produce by the household from home processing to fluid sales, and a shift in control of dairy income from women to men.


Key words: Latin America, Peru, garden cultivation, gender differences, income generation, subsistence production, gender roles, development project, community organization, women’s organization, women heads-of-households

This article explores traditional gardening and garden development projects in Lima, Peru. It details the socioeconomic-economic and nutritional background of low-income target populations served by small-scale food production development projects; discusses “native” food production; analyzes a series of past and contemporary programmes; and offers concrete suggestions to guide future programme design. In the course of establishing themselves in Lima, many female heads-of-households have opted to start small gardens, for they often have small children and are unable to find work away from home. In the study, thirty-two of forty were housewives with small children and no gainful employment outside the home. One main difference between male and female gardeners in Lima is that men often capitalize on their backyard enterprises while women aim to produce food for household consumption. The author contends that the reason most overlooked in the failure of community garden programmes is the artificial nature of the main vehicle used to put them into operation: the mothers’ clubs which are remnants of Peace Corps work in Peru and have no roots in the community structure. One factor key to the success of another gardening project is that women are able to plant those foods in the garden that are required in the daily diet and not easily obtained otherwise.


Key words: Africa, Ghana, gender issues, research agenda, development project, gender analysis, methodology, food security, nutrition

This review has been prepared for the International Development Research Centre (IDRC) of Canada. It is based on four documents sent to the reviewer in connection with a study on food security and nutritional status in Greater Accra, Ghana. The proposal review highlights key issues in gender considerations for research on urban agriculture. It identifies the reviewer’s expectations in line with the title and objectives of the study and ends with suggestions for gender considerations for the proposal. The reviewer questions what the said study will indicate by way of gender roles and extent of participation of men, women and various groups. Resources of land, water, credit, information and inputs such as fertilizer need to be considered from a gender perspective. Gender proportions of poverty and its influencing factors should inform the design of conceptual framework and proposed methodology. The latter should note qualitative methods that make gender enquiry enriching. The reviewer contends that the participation of a female leader researcher does not necessarily guarantee incorporation of a gender perspective. Use and involvement of policy makers, the National Council on Women and Development, women’s organizations and the media are critical at various stages of the research.

Key words: Latin America, Ecuador, household strategies, environmental management, urban poor, income generation, livestock, waste recycling, waste management, women’s roles

This paper focuses on La Argelia, an urban community on the periphery of Quito, Ecuador. Four issues are identified as the principal environmental problems confronting the local community, including contaminated drinking water, unsanitary removal of domestic sewage, illegal dumping of garbage, and contamination from household (in)organic garbage. The study established that women undertake the majority of the environmental tasks in the household, for example the purification of drinking water and the management of domestic waste. Findings reveal that it is often the poorest urban households to engage in such practices, largely as a result of their increased exposure to environmental risk. Many of the households engaged in limited subsistence agriculture and kept animals as a cushion against the loss of wage income. Households recycled garbage and distinguished between inorganic and organic waste largely because the waste had value for their farming and husbandry activities.


Key words: Africa, Rwanda, knowledge, power relations, extension services, gender roles, women’s invisibility, gender relations

This paper focuses on the intricate relationship between knowledge, ignorance and power in the context of a Rwandan development project. The author attempts to demonstrate how ignorance is generated through agricultural extension and argues that agronomic services rely on power structures reminiscent of the ‘old’ premise of social inequality. The paper is based on data gathered in the small town of Buthare between 1985 to 1986. It provides brief insights into gender relations. Different agricultural roles and responsibilities within male-headed households are noted. Women, for example, tend rabbits, produce climbing beans, and plant sweet potatoes. The author also notes women’s uncharacteristic silence in interview situations, despite their knowledge of urban agriculture. He contends that the scenario exemplifies the ‘invisible farmer’ syndrome. Agronomists discuss development only with the husbands. However, the bulk of the tasks and decisions about timing and crop variety are usually carried out by the wives. As ‘invisible farmers’ women are able to somewhat reduced the damage which ill-conceived policies are likely to inflict. Leaders of agricultural intensification programs will need to reconsider the relationship between knowledge and power, which includes a strong gender aspect.

Key words: household strategies, urban poor, income generation, subsistence production, gender roles, gender relations, resource use, labour, decision making, social networks

This article attempts to clarify concepts central to research on women (and, indeed, on all citizens), namely the concepts of “household”, and individual or household “strategy”. For a better understanding of the situation of the urban poor, emphasis has shifted to analysis of household income and subsistence. Here the author contends that it is necessary to analyze the full range of productive activities, both income earning and for the household’s own use, for it is normal for households to undertake a mixture of productive and reproductive tasks. With respect to urban agriculture, the labour contributions by household members, the organization of cultivation, the use of food produced, access to land, constraints on production and experience of attempts by the local authority to regulate or encourage cultivation should all be included in analysis. Household analysis should reflect the various interests, behaviour and contributions of men and women. Strategy implies deliberate planning ahead, with daily decisions taken on a tactical basis in light of longer term aims. Households and individuals formulate and adjust strategies according to their own circumstances, in terms of the resources and opportunities available to them. Strategies are linked to decision-making in the household, and may take the form of income-earning activities, migration decisions, household composition, housing strategies, and kinship networks.


Key words: Africa, Zambia, gender roles, labour, food production, decision making, income generation, subsistence production, research issues, urban policy

This article explores the forgotten or ignored area of food crop cultivation in urban areas in the 1980s. The author contends that the first stage in studying any neglected area is to review existing evidence and policy, in this case from Zambia, to reveal gaps and suggest avenues for further enquiry, policy formulation, and experimentation. The author situates urban agriculture within a wider framework of the gender division of labour, specifically the economic activities of women. Food production in Zambian cities is predominantly a women’s activity, determined by the size of household, income per capita, stability of urban residence, and the availability of land for cultivation around the house and/or within reasonable walking distance. A strategy to increase the household production of fruit and vegetables for consumption and sale must be examined in the context of household decision-making, and especially the labour time available to women. Women’s response to opportunities to grow more food will depend on the extent to which they make decisions about cultivation, the use or sale of produce, and the distribution of benefits within the household. More detailed evidence from urban agriculture projects and wider implications of such a policy must be assessed before more widespread cultivation is advocated. This includes assessing the benefits to households, and especially to women, compared to alternative economic opportunities which might be made available by other initiatives.

Key words: Africa, Zambia, research issues, women’s roles, household strategies

This paper focuses on urban agriculture, based on a review of Zambian evidence and policy, and is set within a context of wider research issues. The author details the relationship between gardening, women and economic activity. The potential of urban agriculture and its implications for urban land allocation and development are discussed, with specific attention paid to women as urban agriculture practitioners. Research needs to focus on the well-being of populations citywide and at the household level. The role of women in household survival strategies is especially important and more information is required.


Key words: Africa, Zambia, women’s roles, intervention strategy

This brief article details the characteristics of urban agriculture in Lusaka, Zambia. The role of women in urban agriculture activities is highlighted. Women, especially those with large families, find it necessary to grow food, although for many it represents significant additional work. Most of the cultivation is done by women and the author provides statistics supporting this fact from a survey of rainy-season garden plots. The author offers suggestions for increasing crop yields via technical assistance, educational programmes, and improved land access for urban dwellers.


Key words: women’s roles, gender bias, income generation, subsistence production, extension services

This brief article outlines women’s involvement in urban agriculture and highlights barriers and solutions to such activities. Farming is a viable alternative to wage labour for women and allows women to work close to home. Women’s role is not limited to food production but includes processing food for home and market. These activities are rarely reflected in official statistics nor are they recognized as a contribution to the family budget. Thus women do not fully benefit from research or extension services.


Key words: Africa, South Africa, marginalized groups, urban poor, elderly women, informal sector, informal settlement, urban policy

This paper examines the present state of urban agriculture in South Africa and analyzes its potential for poverty alleviation. Currently, the scale of cultivation taking place in South Africa is relatively small as compared to other developing countries. The key explanation for the undeveloped urban agriculture sector is the greater returns to land and labour which may be earned from backyard shacks and alternative informal income opportunities in the city. Informal cultivation is primarily a survival niche of the most marginalized and most vulnerable groups in urban areas, in particular for elderly women. Policy issues are raised concerning urban agriculture in post-apartheid urban reconstruction.

78. *Rogerson, C.M.* “Feeding Africa’s cities: the role and potential for urban agriculture”.

The twin problems of food security and increasing urbanization of the African population have helped to raise the profile of urban agriculture as a means to help mitigate the problems raised by these two socioeconomic-economic trends. This paper assesses the role and potential of urban agriculture with these problems in mind. It confronts the issues in three sections: firstly, it examines the case for urban agriculture; secondly, the state of urban agriculture in Africa is reviewed, looking more specifically at the cities of Nairobi, Harare and Lusaka; and finally the general policy issues regarding urban agriculture are discussed. The author briefly summarizes findings of women’s roles and experiences as identified by research undertaken on urban agriculture in Africa. The paper notes that while it is generally accepted that urban agriculture has a vital role, little data is available to assess exactly its effect on household food security and also its impact on the lives of women. These factors are seen as especially important when viewed in the context of the limited resources available to African governments to support the various sectors and sub-sectors of the economy.

Articles by the same author:


This paper details the introduction of the Integrated System for Recycling Organic Wastes (SiRDO) into a block of newly constructed, low-cost, subsidized houses in Mérida, Mexico in 1978. Women have played a crucial role in this process and, in so doing, have strengthened their own standing within their families and communities. They also have become the principal managers of a system that both improves sanitation and offers possibilities for community-based, income-earning activities. Nutrient-rich fertilizer is applied to urban gardens, and treated black water passes into vegetable garden beds and is channelled into ponds to support aquaculture. The women have formed a cooperative which is promoting the marketing and sale of fertilizer, based on good results from their own gardens. The paper also outlines the experiences of an urban community in the Valley of Mexico. It points to the different technical, economic and social management strategies of this community compared to the Mérida experience. Reference is made to horticulture, aquaculture and waste management, as well as women’s roles in the more formal organization structure for the implementation of SiRDO. Lessons learned from the SiRDO experience are highlighted, including the need for women’s input and decision-making on the appropriateness and adaptation processes of new waste management technologies.

Related articles:

Key words: Africa, Ethiopia, nutrition, health, livestock, dairy cattle, income generation, development project, gender issues

Previous farm-level studies have shown that adopting crossbred cows and improved feeding and management strategies increases milk production and household income. Preliminary results of this study show that cash income from dairying was significantly higher in households that keep crossbred cows. Both men and women were observed to benefit. Evidence also points to improvements in human nutrition and health. Other studies in other areas have reported that as cash crops are introduced in smallholder production systems, with greater integration into the market, women may lose control over cash income to men, who tend to spend less on food for the household. This study indicates that women in households adopting improved crossbred cows maintain control over income allocated for food purchases and make over eighty percent of household expenditures on food. The men in these households spend some twenty percent more on food than men in households with no crossbred cows.


Key words: Africa, Nigeria, rural-urban linkages, dairy cattle, dairy production, dairy processing, income generation, social networks, power relations, gender relations, women’s roles, market women, intervention strategy

This article considers some aspects of the productive work of Fulbe women in Nigeria, and examines the ways in which their contribution to the household income through the sale of dairy produce has sustained Fulbe communities. Women, through the processing and the daily sale of their products in the urban market contribute the cash for the day to day expenses of the family unit. The daily trips to the urban markets also make them important channels of information for their small rural community. Dairying is no longer carried out on a purely subsistence basis. Women have made inroads into the cash economy especially through the urban markets. Women have thus managed to obtain important leverage through dairying in three ways. First, it serves to balance power relations between male and female household members. Second, it also provides links for women to the larger urban and rural community. Third, it generates leverage for women through their attempts to integrate livestock and dairy economies of the rural areas with urban markets. Modernisation of women’s dairying activities, through simple and appropriate mechanization and refrigeration and improved processing techniques for production and supply of fresh milk, would potentially allow a larger populace to benefit.

This paper explores the intersection of women’s rural activities and urban settlement based on a study in Beira, Mozambique in the early 1980s. Evidence indicates that women have long been involved in urban agriculture: statistical data identifies a predominance of female practitioners and interviews reveal generational trends of women’s agricultural work in Beira. The expanding war conditions played a major role in the development of small gardens, keeping livestock and extensive rice fields in (peri)urban areas. The majority of women in the study worked full time for a wage and were involved in urban agriculture for subsistence purposes. It is clear that women’s agricultural work within city boundaries is a crucial part of a family’s food supply. The Women’s Project within the Office of Green Zones for Beira includes strategies for disseminating agricultural information, and supplies seeds, hoes and other inputs to the women who participate. The role of the city government and urban planners in developing support systems for urban women could increase women’s production and provide important backing to efforts to improve urban nutrition.


The purpose of this paper is to examine how urban agricultural activities can contribute to sustainable development in Sub-Saharan Africa and how the World Bank can expand its involvement in urban agriculture in the future. Discussion of urban agriculture centres on its nature and extent in the region; key constraining factors; past and potential approaches; and support for this activity by the World Bank. Women are categorized as a “special group of farmers” and are noted to be the primary farmers in East Africa, while male urban farmers dominate in Senegal and Argentina. It is noted that the more full-time employment men hold in other industries means more significant roles played by women in urban agriculture. Gender bias is identified as a constraint to urban agriculture because women often have unequal access to markets, inputs, land and credit compared to male farmers. Recommendations for World Bank involvement include analyzing the benefits of urban agriculture to households, especially to women, compared to alternative economic opportunities that might be made available through other initiatives.


This book has four main purposes: (1) to present a comprehensive picture of urban agriculture in Asia, Africa and Latin America; (2) to define a distinct industry that needs to be recognized and treated as such; (3) to persuade leaders in government, non-governmental organizations, research institutions and other public and private entities to conduct research, support action projects and eliminate unnecessary constraints to the growth of the urban agriculture industry and (4) to foster a climate that empowers practitioners and the agencies that back them to fulfill the industry’s potential for improving public well-being and the quality of urban life. Gender is addressed, in part, through a brief examination of women as a special group of urban farmers. Here the distinct experiences of women, in comparison to men’s roles
and experiences, are identified through issues such as multiple roles, predominance of female practitioners in some contexts, participation in UA-related activities, for example processing or marketing, and cultural and legal constraints. Examples highlight gender and women’s issues, including a women’s hydroponic cooperative in Bogotá, Colombia, and community kitchens in Lima, Peru.


Key words: waste management, waste recycling, women’s employment, equity

This paper describes how cities can be transformed from being only consumers of food and other agricultural products into important resource-conserving, health-improving, sustainable generators of these products. In particular, agriculture in towns, cities and metropolitan areas can convert urban wastes into resources, put vacant and under-utilized areas into productive use, and conserve natural resources outside cities while improving the environment for urban living. Agriculture within urban and peri-urban areas is defined as a common and beneficial land use. This paper also gives examples of urban agriculture programmes which help alleviate poverty while creating these benefits. Brief references are made to women farmers regarding income. Urban agriculture is noted to offer opportunities to some groups in particular (e.g. women) and thus have positive impacts on equity.


Key words: Pacific Islands, Solomon Islands, community organization, women’s organization, women’s roles, garden cultivation, social networks, nutrition, health, household strategies

This article focuses on one particular strategy of promoting food production to improve the home environment and family health in Honiara, the capital city of the Solomon Islands. This article details the experiences of The Honiara Gardening Club with a programme (funded by UNICEF’s Pacific Programme) aimed at assisting families grow at least part of their daily food needs. Following a rapid appraisal of problems and potentials for growing urban food, numerous suggestions were incorporated into a plan of action with the community to carry out the suggested activities. The meetings were mostly attended by women, who are traditionally responsible for growing food. The women were attuned to specific urban constraints in food production, and felt they had neither the confidence nor experience with growing food in the city. The Club organized home garden tours so the women could observe and talk with other women gardeners. The Club held workshops in several communities to talk about good nutrition and health and links with urban food production. Activities undertaken via the Honiara Garden Club have increased food availability and food security, and have improved the home environment.

Key words: Africa, literature review, historical perspective, gender roles, gender bias, subsistence production, income generation

This paper considers the phenomenon of urban agriculture in Africa and presents a survey of related literature. The author briefly discusses women’s dominant role in agricultural labour. The author contends that this female activity does not have long historical traditions due to male-dominated urban migration during the colonial period. Women’s predominance in urban agriculture is due to women’s lower educational status and lack of access to formal employment, as well as women’s continued responsibility for securing household subsistence. If agricultural activity develops into commercial enterprise, it becomes more typical that it is headed by men. Since women predominate in urban agriculture, extension systems must also largely be targeted on, and conducted by, women. For future research, the role urban agriculture plays in the combination of subsistence and income-generation must be analyzed, with special attention to the sexual division of labour within the family.


Key words: Pacific Islands, garden cultivation, urban poor, sustainable development, urban planning, urban policy, community organization, women’s organization

Urban food gardening is seen as an important means of overcoming problems caused by unemployment, inequality, poverty, falling real wages, malnutrition and nutrition-related degenerative diseases in the small-island states of the Pacific Ocean, such as Papua New Guinea, Fiji, Tonga, Kiribati and Nauru. This paper argues that the formal promotion, expansion and improvement of small-scale urban food gardening is a direct and economically, socially, technologically and nutritionally appropriate means of bringing about sustainable national development and promoting food security. Despite the fact that the potential urban foods production is not clearly understood by planners and policy makers, it should be viewed as a component of agricultural development strategies given the benefits it confers. Policies which would lead to its growth are discussed. The paper highlights a community-level program of The Foundation for the Peoples of the South Pacific (FSP). FSP that has been mainly working with women to improve cooking, composting and the production of a narrow range of environmentally and culturally proven indigenous and exotic vitamin A-rich vegetables.


Key words: food security, food production, women’s roles, street foods

The development community and universities have been slow to turn the focus of their research and programs on community, agriculture, or environment in urban areas. The author contends that shifts in the world’s population require a re-thinking of how city residents will be fed. Various activities are identified as potential strategies for urban food production and income generation. Women’s roles in food production are highlighted in descriptions of street foods and urban agriculture.

Key words: Africa, Asia, Senegal, street foods, gender relations, gender roles, labour

This book is the culmination of fifteen years of research in provincial cities in the Philippines, Thailand, Indonesia, Bangladesh, Egypt, Nigeria, and Senegal. It provides the first empirical study of who makes, sells, and eats food on the streets. Links between street foods, urban agriculture and gender divisions of labour are briefly made in the context of Ziguinchor, Senegal, where a densely populated commercial centre is paired with a patchwork of urbanized villages and paddy rice fields.

**Articles by the same author:**


Key words: Africa, Tanzania, women’s resistance, informal sector, income generation, peri urban, women’s roles, gender roles

This study argues that noncompliance can be seen as an act of resistance and the basis for institutional change, which occurs through the process of developing alternative structures and institutions that eventually may come to replace many of the problematic state rules. The economic crisis in Tanzania meant that the reliance of household members on wage incomes in the formal sector was replaced by a reliance on the informal income-generating activities. Within this context, the author briefly details the incidence of urban farming in Dar es Salaam whereby most urban dwellers farmed in the peri-urban areas surrounding the city. The author notes the dominance of women in agricultural activities, and provides statistics and short examples of women and men's experiences in urban farming.
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